WICKED WORLD - THE SPIRIT OF WICKED PROBLEMS IN THE FIELD OF HIGHER EDUCATION

Edited by Satu Peltola





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Satu Peltola

PREFACE

During this journey with the Wicked Problems project, my eyes have been opened in many ways. First of all, I realised that I wasn't just privileged to have the opportunity to join a project like this; I was privileged to obtain so much useful information on problems in education which are actually close to the problems that I face during my everyday life in the global business world. I was also privileged to join the international Wicked World seminar from which this volume has sprung, and to meet unforgettable people with engrossing ideas and things to say. Personally, I have learned a lot and I hope – and in fact believe - that everyone who understands the concept somehow did learn a lot, too.

It is useful and important to be able to connect business life and education, and a project like this is one way to do that, although that wasn't the main target. The problems that we face in business are similar or at least very close to the wicked problems studied in this project, although we are looking it from another angle. For example, in business life we are struggling to find people with a suitable education, so universities need to have real-time information about our needs.

I believe that the findings of the project team will live on and continue the development of the education system, bringing people from other universities closer in order to share these good ideas and good practices.

We gratefully acknowledge the financial support from European Social Fund and Kymenlaakso University of Applied Sciences.

I just want to say thank you to everyone for the good job! This is not a goodbye; this is the beginning of closer cooperation!

Tuula Liukko

Vice President, Basic & Fine Chemicals

Pöyry Finland Oy

Chairman of the steering committee of the Wicked Problems Project

I INTRODUCTION

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We live in a global world in which news spreads as fast as light and dynamic social networks cause wicked problems for companies and consumers. "Surf the chaos" said **Andrew Gale**, **Professor of Project Management at The University of Manchester** at the beginning of his keynote speech at the first Wicked World Seminar 2013, held in Kouvola in September 2013 (Figure 1). The inspiration for this wicked problem journal is based on the seminar presentations, and thus these articles focus on the many faces of wickedness in the business world – especially related to the challenges which people currently in higher education will tackle constantly in their studies and careers.



Figure 1. Keynote speaker Andrew Gale – "Managing Wicked Projects" at Wicked World Seminar 2013 (Photograph: Mariia Kiseler)

Despite efforts to discover the foundations of wicked problems in the business world or, most recently, in global business and social networks, wicked problems remain a surprisingly 'unsolved' phenomenon. No single (universal) definition of wicked problem has been proposed that adequately covers the diversity of ideas and methods gathered together under this concept. Wicked problems have been a topic of interest during the past year – argumentation for and against has been harsh and so far there has been no universal agreement on the of role wicked problems, and thus no solutions (even if the ultimate definition of wicked problems avoids the term 'solutions', particularly in the business world there is a high need to find solutions to solve problems at least on some level). Indeed, the variety of research suggests that wicked problems continue to expand in their meanings and connections, revealing unexpected dimensions both in practice and in our understanding. To understand the current change, it is important to recognise that what are commonly regarded as wicked problems today are challenges that are not only related to business environment issues but lie mostly within companies. The concept of the wicked problem has been presented in the article of **Team Leader Ari Lindeman**. In his presentation at the Wicked World Seminar 2013, he also highlighted some of the world's wicked problems in the global context, such as sustainable development, continuous climate change, uncontrolled population growth and limited [food and oil] resources. Team Leader Lindeman's article "Locating the question of wicked problems in education" presents the different perspectives of wicked problems in general, but especially in higher education. The article gives an overview of the development of the concept and suggests a framework for its application and further research in higher education.

The difference between wicked and tame problems is also presented in Bland Tomkinson's article, even if the main focus in his work is the Problem Based Learning (PBL) method in education. At the Wicked World Seminar 2013 and in his article, **Bland Tomkinson** presented "*the Wicked Problem as a Tool for Learning*" by using as a case study the PBL method developed at Manchester University. One of his challenges has been to define which teaching method is appropriate in the current dynamic environment. The study covers two aspects: i) social network learning in [intercultural and interdisciplinary] teams, and ii) behavioural methods in which the teacher teaches in front of the students. Based on their survey of graduated students, the sociocultural method was more suitable than the traditional behavioural model for teaching and learning. He also investigated why this was the outcome, and the result was that students will remember things for a lot longer when they have to search for the information by themselves rather than just having somebody speaking and teaching in front of them. Teamwork in multidisciplinary projects may provide a broader view of wickedness and how to manage such problems in working life. A similar teaching method is shown in action in Figure 2.



Figure 2. Kymenlaakso University of Applied Science: Master's students of Business and Design in multidisciplinary project management workshop at Wicked World Seminar 2013 (led by Principal lecturer Dr. Satu Peltola, Photograph: Satu Peltola)

Cultural issues have been under consideration for several decades, but today the context is the management of intercultural teams and change management. Director of Business Excellence at Robert Bosch GmbH, Dr. Petra Vogler approaches such topic in her article on "Indian perspectives on intercultural change management". At the seminar she pointed out several significant factors that impact on team working, such as communication and cultural issues. In her article she also focuses on cross-border and cross-cultural characteristics. This lead us to the concept of intercultural management, which includes all measures that are geared so that a company's employees work together with understanding with colleagues, customers or partners from different cultural backgrounds. Dr. Vogler refers to examples of Indian corporate culture and presents a model by Fornet-Betancourt which summarises seven characteristics of the new form of intercultural philosophy. However, the change is already begun and small steps are taken for instance, consumers are more awaked than even before and they want to know the origin of the products. Consumer behavior is changed towards more environmental friendly and local products and therefore, there is a challenge for food industry to provide such product inexpensive and sustainable ways. Social media and global networks have made us consumers more aware of a product's safety and an origin. Also old habits are under consideration and we require more from world famous names and brands that were built on images - nowadays we all need also facts, even if the final decision could be based on soft facts such as feeling, color or outfit. Modern customers are more enlightened to companies' ethics and values. Recent accidents such as clothing factory fire in Bangladesh spread knowledge of poor conditions and salary of factory workers. This may have an effect on consumer behavior in a short run, but the long term impacts are unknown.

However, the change has already begun and small steps are being taken: for instance, consumers are more awake than even before and want to know the origins of products. Consumer behaviour

has moved towards more environmental friendly and local products and therefore there is a challenge, for example, for the food industry to provide such products in inexpensive and sustainable ways. Social media and global networks have made us consumers more aware of product safety and origins. In addition, old habits are under consideration and we require more from world famous names and brands that were built on images – nowadays we all need facts as well, even if the final decision is based on soft facts such as feelings, colours or outfits. Modern customers are more enlightened about companies' ethics and values. Recent accidents have spread knowledge of poor conditions and factory workers' salaries. This may have no effect on consumer behaviour in the short term, but the long-term impacts are unknown.

What triggers truly drive us to change our consumption – sustainable development, environmental issues, or does money do the talking in our purchase decisions? Such topics were discussed in Bland Tomkinson's article, in which he refers to Brundtland and colleagues' (1987) list of issues such as overuse of resources, pollution, climate change and continuing growth. A similar context of responsibility and welfare issues is pointed out in the article by **Principal Lecturer Dr. Markku Nikkanen,** "*Rethinking responsibilities: on one and One*". In his presentation at the Wicked World Seminar 2013 he pointed out interesting topics in company operations, mainly new areas or aspects of doing business. Making profit is one purpose, but besides that, companies can participate in many roles in society. Social enterprise is a form of doing business in a responsible way. Nowadays, there are several different ways to operate with a social enterprise - social enterprises have ethics and values in common and their main purpose is the welfare of people and the environment. Social enterprises operate in the same way as a normal company, with added tasks based on their values.

The summary of the seminar inspires us to realise that it is not only the big issues that create massive chaos or the biggest waves: instead a dramatic disaster is caused by a large amount of small things. Professor Gale pointed out breath-taking examples of wicked problems, using the metaphor of the tsunami –which is not itself THE issue, but is caused by many smaller problems, which together form the true wicked problem that will impact in very difficult and multidimensional ways.

2 REVISITING THE CONCEPT OF WICKED PROBLEMS – FROM INTEGRATIVE DISCIPLINES TOWARDS INTEGRATIVE EDUCATIONAL PRACTICE

Ari Lindeman

Kymenlaakso University of Applied Science, Finland



Figure 1. Seminar participants working with a wicked problem (Photograph: Mariia Kiseler)

Prelude

- My dear friend, said Fjodor Simeonovits carelessly, this is Ben Betsalel's problem. You see, Kaliostroha already proved that there's no solution for it.
- We do know that there's no solution for it, Hunta said, but we want to know how it is solved.
- You ponder weird things ... How can a solution be found if there isn't one? This is completely absurd!
- Excuse me, Teodor, but you are the one to treat this singularly. It would be senseless to look for a solution even if it happened to be found. It's a question of how to deal with a task that has no resolution. This is a matter of principle, and I see that you, as a practically minded person, are not to solve it. I think that I started to discuss it with you in vain ...

(A dialogue in Arkadi and Boris Strugatski's novel, *Monday begins on Saturday* from 1967. Translation from Russian via Finnish to English by Marja-Liisa Sirén-Huhtinen and Ari Lindeman)

Introduction

Rittel and Webber's seminal article (1973) on the concept of wicked problems celebrates its 40th anniversary this autumn. For this reason, the authors' original faculties at the University of Berkeley, California, held a seminar in October 2013.¹ Kymenlaakso University of Applied Sciences' Wicked World seminar² earlier in the autumn and this publication could not be better timed for reflecting on the evolution of the concept of the wicked problems and thinking of its further development and use in educational programmes. This article gives an overview of the development of the concept and suggests a framework for its application and further research in higher education.

The concept of wicked problems is wicked in itself. One may ask where this concept originates and what its evolution has been up until now. In considering the evolution of the concept, one may focus on its disciplinary engagements. Is it more at home in some disciplines than in others, or does it travel well across disciplines? What theoretical question 'wicked problems' was assumed to answer?

Another, more practice-orientated, way in which to frame the wickedness of the concept is to ask what societal circumstances brought it about. What was the problem or problems that it was used to solve, and how useful has it been in solving it/them? One may also think of the transformation of societal problems through time. If there was once a practical reason for applying the concept,

¹ Wicked problems in socio-ecological systems: symposium and workshop 26-27 Oct. 2013

² Wicked World seminar, 26-27 Sep. 2013, Kouvola, Finland. See www.kyamk.fi/wickedworld

what is the situation now? How is it still relevant to people? Is wickedness a permanent feature of the world?

The third way to look at the wickedness of 'wicked problems' and wicked problems of life/the world can be found in the combination of theory and practice as we read it in the mission of the Finnish universities of applied sciences. Still another way to look at this would be through the transformation of cultural values, which could be seen as an educational perspective. The reader is invited to think about to what extent these four perspectives are touched upon in this article. It is clear, however, that the concept of wicked problems alerts us to the complexities arising from recurring conceptual evolution and contextual developments, emergence of applications and intentional transformation of cultural values through more or less institutionalized educational practices.

This article aims to locate a place for the concept of wicked problems and wicked problems of the world for educational purposes. The ensuing text does not offer a full account of the new educational model based on wicked problem thinking. It should rather be viewed as a probe and an invitation to delve deeper into the subject and to transform master's level education towards holistic problem solving through the use of regenerative dialogue between traditional disciplines and professions as well as with the public.

The article unfolds in three sections. To start with, it revisits the argument of Rittel and Webber's original paper *Dilemmas in a General Theory of Planning* from 1973, which is often marked as the starting point of the modern discussion of wicked problems. The article goes on to link Rittel and Webber's contribution to growing literature on wicked problems and design thinking which it elucidates through Richard Buchanan's *Wicked Problems in Design Thinking* (1992). It is thus argued that the evolution of the concept of wicked problems can been seen to have focused for a long time on integrative disciplines, such as, planning and design. The second section provides an overview of the resurgence of wicked problems literature in the past decade or so. It includes pieces of work ranging across various fields of the social sciences (organisation theory, leadership studies, applied economics, education, healthcare, sociology, social policy, planning and design studies) to public policy papers that can again be seen as marking the signs of turbulent times. The last section proposes a framework for applying and studying the concept of wicked problems among higher education practitioners.

Discussion of wicked problems begins in integrative disciplines

Rittel's original ideas about the wicked nature of problems were developed around 1967-1973, a culmination of which was the seminal article by Rittel and Webber (1973). This article can be seen as belonging to a longer strand of writings in the realm of creative problem solving starting with the pragmatist philosopher John Dewey's *How We Think* (1910) and *Problems of Men* (1946), and including since then figures like Edward DeBono and Herbert A. Simon (p. 3, Conklin, Basadur, VanPatter 2007).

Indeed, Rittel and Webber stage the article very much in the spirit of John Dewey's socially motivated and democratically inspired pragmatism. They begin the article with a reference to

George Bernard Shaw's remark that "every profession is a conspiracy against the laity", and write about the growing disillusion of the public with the expertise of disciplines and professions and their inability to address societal problems, "problems of men", effectively from the point of view of the multiplicity of stakeholders:

"Few of the modern professionals seem to be immune from the popular attack – whether they be social workers, educators, housers, public health officials, policemen, city planners, highway engineers or physicians. Our restive clients have been telling us that they don't like the educational programs that schoolmen have been offering, the redevelopment projects urban renewal agencies have been proposing, law-enforcement styles of the police, the administrative behavior of the welfare agencies, the locations of the highways, and so on. In the courts, the streets, and the political campaigns, we've been hearing ever-louder public protests against the professions' diagnoses of the clients' problems, against professionally designed governmental programs, against professionally certified standards for the public services." (p. 155 Rittel, Webber 1973)

According to Rittel and Webber, the expertise of the professions has efficiently built excellent infrastructures for societies but the weakening of the public's trust in professionals stems from limited consideration of, or the system's inability to deal with, questions of (policy) goal-formulation, problem-definition, and equity issues (p.156, ibid.). They identify the problem as lying in social professionals' way of mimicking the problem-solving methods of (natural) scientists and engineers, "assuming they could be applied scientists" (p.160, ibid.).

Rittel and Webber describe this approach as the 'first generation' systems analysis approach to problem solving, which includes eight sequential steps: 1) understand the problem, 2) gather information, 3) analyse the information, 4) generate solutions, 5) assess the solutions and pick one, 6) implement it, 7) test it, and 8) modify it (p. 6, Conklin, Basadur, VanPatter 2007).

Rittel and Webber offer the concept of wicked problems to counter this kind of misguided planning and problem-solving tendencies. The core of their article consists of distinguishing wicked problems from easy to solve tame problems and slightly more complex messes using the following characteristics: 1) a wicked problem has no definition, the problem depends on a proposed solution and the possible solutions are infinite, 2) you never know when you have the solution; will and resources determine when the solution is good enough, 3) there is no right or wrong answer, rather better or worse depending on the stakeholder, 4) there is no quick way or complete set of criteria for evaluating solutions, 5) each attempt at a solution has consequences for people, and therefore should be treated appropriately as a human experiment not a natural science one, 6) no exhaustive list of possible solutions or solution model exists, 7) wicked problems are unique and important key differences may offset the effect of the common characteristics of seemingly similar problems, 8) each wicked problem is a symptom of another one at another level, so it is useful to approach problems from a high enough perspective, 9) explanations are used to determine the problem solution, and the developer's worldview matters, 10) there is no right to be wrong, one is responsible for improving (or not) the world (p.161–167, ibid., see also pp. 33–34, Raisio 2008).

Although the list includes the idea that there is no good standard model for going about a wicked problem (Point 6 above) Rittel and Webber did provide, in another article, an alternative to the first generation planning model aimed at processing wicked problems, summarised as follows by Conklin, Basadur, VanPatter (2007): 1) symmetry of ignorance, 2) maximised involvement, 3)

deontic premise, 4) objectification, 5) no scientific planning, 6) planner as midwife, 7) scepticism, 8) moderate optimism, 9) conspiracy model of planning, 10) argumentation. (pp. 7-8).

One might think that Ritter and Webber fell into the natural scientists' trap when providing a simplified model for problem-solving in the case of wicked problems. Unlike the steps of the first generation planning model, which presents a tool with which to go about the problem solving process, Rittel and Webber's ten characteristics of the second generation model has been seen to describe, not a tool, but an operating context (Characteristics 1–3, 5, 9) and related skills and behaviours (Characteristics 4, 6–8, 10) (p. 8–9, Conklin, Basadur, VanPatter 2007). And, as will be seen in the last section of the present article as well as in other articles in this volume, the focus on modifications of contexts and development of participants' skills and behaviours become cornerstones for improved educational approach to wicked problems.

Strong allegiance to the Deweyan pragmatism explains how Rittel and Webber emphasize that people involved in processing wicked problems should not be looking for truth (as such) but improving the characteristics of the world in which people live (p.167, Ritter and Webber 1973). The paper ends by considering the social context which 40 years ago was already starting to be challenged by problems of equity and a rising pluralism of values, lifestyles and individual choices. They foresaw that wickedness is a permanent and growing feature of the world, and that all kinds of planners would need to rethink the paradigm on which their work is based (p.169, ibid.).

Rittel and Webber's contribution to the earlier discussion on problem solving was not to introduce a new way of solving ever more complex problems but rather a new way of seeing that focuses on problem understanding instead of solutions. So, the initial approach to the problem area and the problem solving process are (almost) all that matter, and thereafter it is, instead of a fight over competing truths, a question of negotiating shared meaning among stakeholders and achieving coherent action, not a final solution (pp. 4-5, Conklin, Basadur, VanPatter 2007).

Later writers have identified some weaknesses in Rittel and Webber's conception. First, there seems to be too little emphasis on the role of imagination in the problem definition phase. Second, the originators of wicked problems thinking relied mainly on argumentation, in the sense of traditional political debate, as the process by which stakeholders negotiate. Today, writers think that constructive dialogue can and should mitigate problem solving instead of or alongside argumentation (p. 11, Conklin, Basadur, VanPatter 2007).

Planning and design have long been the main areas concerned with the concept of wicked problems. This is understandable, considering the nature of these broad disciplines which can also be seen as "integrative disciplines" as Richard Buchanan writes (p. 14, 1992). The discussion has moved from these general calls for better interdisciplinary communication and more socially relevant problem-solving to more contextualized treatment of design issues with transdisciplinary research practices and combinatorial innovation of which, for instance, Terry Cutler (2009) writes.

Before moving more to the 21st century discussions on wicked problems it may be worth noting that Rittel and Webber, Buchanan, and also Cutler write in the English speaking American and Australasian intellectual context. Conklin, Basadur, VanPatter (pp. 13-15, 2007) already reminded their audience of the fact that within the USA alone there has been two separate "centers of thought leadership" related to wicked problems which hardly at all talked to each other. Moreover, the discourses referred to remain within the new continent, namely, North America. The discourse

connected to Ritter and Webber is related to urban planning and policy issues and is based on the West Coast of the USA, and a more imagination, innovation, creative problem solving and creative education based strand is based around Buffalo on the East Coast. As we are joining the widening community of thinkers and practitioners engaged in thinking about and working with wicked problems we should be aware of the challenges of discussing and applying the concept in different intellectual and cultural contexts. For instance, the nature of government involvement in society, other institutional structures, and the degree of cultural homogeneity should be taken into account when discussing, developing, and working with wicked problems in a particular local context.

The concept of wicked problems adopted by different disciplines

The discussion on wicked problems has also surged in fields other than planning and design in the past decade. Global and governmental policy issues have become more perplexing and proactive governments have looked for guidance from wicked problems approaches. (Australian Government 2007) Managerial challenges have also escalated in the wake of internet bubble and global financial crisis and shifting of the power balance between East and West which may be reflected in the attempts to draw lessons for managers and leaders from the wicked problems thinking. (Conklin 2006, Camillus 2008, O'Grady 2008) There is also a smaller but recognizable interest in educational applications of the concept of wicked problems which is often related to the wider discussion on interdisciplinarity in higher education. (Jackson 2008, Grint 2008, Malpas 2009, Yap 2012, Tomkinson in this volume)

In Finland, the concept and applications of wicked problems have come under systematic academic enquiry, particularly in research on social and health care administration. This seems to reflect in a timely manner the gigantic challenges that the Finnish government and health care system faces in its struggle with structural transformation (Vartiainen 2005, Raisio 2008, Raisio 2010, Vartiainen et al. 2013).

Harri Raisio's doctoral dissertation Embracing the Wickedness of Health Care - Essays on Reforms, Wicked Problems, and Public Deliberation (2010) calls for new ways of seeing and understanding complexities in health care reforms. Raisio's work aims to increase the awareness of the wickedness of problems that it sees as the key problem in on-going reform practices. Reformers try to approach reform tasks with models that are too mechanistic or simplistic. He claims to have developed a new ideal for health care reforms that does rely on neither the more commonly used complexity thinking alone nor on systems theory although both of these are intertwined with wicked problems thinking. He thinks that by considering the concept of wicked problems, one achieves a more radical and farsighted ideal model (p. 35, Raisio 2008, Raisio 2010). In addition to summarising and advancing the theoretical discussion on wicked problems for the Finnish audience, Vartiainen et al. (2013) have applied wicked problems thinking for managers in their recent book which provides practical advice on how to benefit from wicked problems thinking. As was noted above, the use of the concept of wicked problems in a managerial and organisational context has indeed been typical of the wicked problem related writings during the past decade, and the Finnish academic work is a good example of this research direction. Viewed in this light, the thematic context of the Wicked World seminar - leading projects, cross-cultural management and

health care promotion – and the target audience including part-time master's students who work in or are entering managerial and leadership positions reflect the recent wicked problems literature. The wicked problems approach sensitises the manager to the texture of the world and helps them to see the need for collaborative partnerships across different boundaries from early on – be they disciplines, professions or other forms of salient power structures.

The managerially inspired work on wicked problems has quite a narrow focus; however. Finnish studies by Raisio and Vartiainen and others centre around organisational development questions (Vartiainen et al. 2013) and concern one sector of society, namely health care provision. Their work does involve a strong research strand studying deliberative democracy, which has applications in most fields of societal planning, but so far that research, too, is focusing mainly on health care sector practices.

To open up the horizon of the application of the concept of wicked problems and to allow movement of the discussion to educational practices, which is the area that this article still aims to probe, it is worthwhile to consider a summary of the reasons for the relevance of the wicked problems approach today provided by the American agricultural economist Sandra S. Batie (pp. 1180–1181, 2008). She lists four key drivers for the recent surge of interest in the concept of wicked problems: 1) improved understanding of system connections and volatility, 2) today's wicked problems do not fit the linear model of (disciplinary) science, 3) globalisation has challenged the monopoly of western science's arbitration of what constitutes valid knowledge, 4) challenges to normal sciences are enabled and reinforced by new ways of communicating among stakeholders that provide civil society with low-cost access to a wealth of data and information as well as low costs of political organising.

Higher education institutions and their educational models are not immune to these kinds of drivers. In order to address such major challenges, higher education institutions need to rethink their missions. Research professor Antti Hautamäki from University of Jyväskylä sees the wicked problems approach as a much awaited redirection of the mission of the classical university (Hautamäki, Ståhle, 2012).

They locate the task of the future university in between liberal education (Humboldtian Bildung) and product innovation. The 'new Humboldtian university', as Hautamäki and Ståhle call it, must engage in humanity's most challenging problems. These wicked problems refer to burning and complex challenges which on a global scale include sustainable development, climate change, provision of health and education and nutrition for all, urbanisation, poverty and security. Wicked problems can also be interpreted at the national level as, for instance, Pekka Himanen (2012) and Castells and Himanen (2013) have recently done from the perspective of Finland. A regional interpretation for Kymenlaakso would be interesting, too; to use wicked problems approach to tackle ageing, regional resource scarcity and cultural lock-ins, marginalisation of youth, mental health problems and sustainable use of natural resources.

We may now turn to our own operations and ask; how do our respective master's programmes equip students to address problems like these in their professional capacity? What new concepts and collaboration between disciplines and professions and with industry and society are needed, first, to genuinely recognise these problems and their wickedness, and second, to formulate them meaningfully and work through them constructively even without hope of a final resolution? The advantage of our master's programmes in this respect is the fact that they are part time and that the students are typically fairly mature professionals. The students are working very close to genuine and even wicked problems. In addition, we have become better at helping them to be sensitive to this, and to start with what is close at hand, as it were. However, I am not sure that we are visionary enough, collaborative enough and conceptually adequate enough to formulate sufficiently challenging questions with relevant partnerships that would be needed to effectively approach the ageing of the Kymenlaakso population or local resource scarcity for international business innovation, to name just a couple of our common challenges. Let us now turn to the final section of the article in which an educational framework is suggested that is aimed at recognising and addressing wicked problems, not just in health care but in other areas as well.

Towards a framework for studying and applying the concept of wicked problems in master level education

The concept of wicked problems has been discussed and applied in many disciplines and in the context of various interdisciplinary endeavours, particularly in integrative disciplines such as planning and design. The context of this publication, Wicked Problems project and its Wicked World seminar, was designed to help in improving the relevance of part-time master's level education through transforming professional practices among the not-so-integrative disciplines of engineering, social services, health care and business management. Indeed, the concept of wicked problems lends itself to reforming educational practices since approaches suited to tackle wicked problems are said to be more about learning than knowing, and learning is certainly at the core of education (p. 42, Raisio 2010).

Our educational challenge can be viewed as a wicked problem in itself (Jackson 2008, Bore, Wright 2009). Norman Jackson has discussed this when trying to promote creativity in higher education. He sees educators' task as preparing students "for jobs that don't yet exist, using technologies that have not yet been invented in order to solve problems that we don't know are problems yet" (p. 1, Jackson 2008). And he continues to claim: "Creativity in higher education is embedded in the wicked problem of how we prepare and sustain learners for a lifetime of uncertainty, change, challenge and emergent or self-created opportunity and they will need not only their intellectual ability, practical skills and will to survive and prosper, but also their imaginations and practical creativity" (ibid.). Jackson's focus has been on the creativity needed and learned through solving wicked problems whereas James O'Grady has been experimenting with an educational approach which would enhance innovation in organisations (2008).

The first striking feature which comes across in the wicked problems literature discussed in this article is the *awareness* of the problem's wickedness in the first place. The earlier writers Rittel and Webber and Buchanan all argued that a single disciplinary view or professional perspective does not allow for an appropriate sensitivity to indeterminate and emergent features of multifaceted problems because of the individual discipline's inner logic of purporting to be able to diagnose the problem and knowing the solution on the basis of the expert knowledge that it professes.

Harri Raisio's doctoral dissertation lists as one of the two main practitioner contributions of his study the need to raise awareness of the wickedness of the problems in health care on which his

studies focus (p. 106, Raisio 2010). Vartiainen's research group's recent book further emphasises this point. Health care professionals, administrators and reformers have yet to grasp the full import of the wicked problems approach, or that is how it seems, as the reforms and development efforts do not lead to expected results due to implementation failures. They claim that the starting point of health care reforms is ill-conceived. (Vartiainen et al. 2013)

Development of appropriate awareness seems to require careful attention and a lot of work, in particular, as the postmodern consciousness is bombarded with ever-increasing number of media and messages (Guignon 2004). It is first a question of individual's awareness of herself which is difficult as it is, and second, there's awareness of others and collective awareness. Elsewhere in this publication, Markku Nikkanen offers interesting pointers as to how problematic raising of awareness can be in the context of managerial talk of corporate social responsibility. Further development is needed to identify and experiment with awareness building methods for master students and how to implement them in curricular practice. The challenge is that awareness should be widened rather than sunk deeper into personal and disciplinary idiosyncrasies which just prevent approaching wicked problems constructively.

The second message that comes across in writings about wicked problems is the need for *interaction*, collaboration, negotiation and public argumentation. The need for interaction seems to be both horizontal and vertical (if the latter may be used, as it admittedly implies that experts and the public are on different levels, although the aim is to meet and work on the same level, as it were). The call for horizontal interaction concerns the need for different disciplines and professions to work together to address problems of a more complex nature. As Raisio also notices, this call is shared by all writers on wicked problems, and it seems to become ever more pressing as the variety of disciplines grows, professions' competition for scarce resources accelerates and the world's problems become more wicked due to increasing social complexity (pp. 42–44, 2010). This development is quite interesting and paradoxical though; many funding agencies strongly encourage interdisciplinary and transdisciplinary research while disciplines are competing for scarce resources and evaluation mechanisms of research proposals remain biased in favour of single disciplines. (Huutoniemi 2012) As indicated earlier, Raisio's work has also focused on what is here called the vertical direction. This deals with ways in which experts and the public engage together in problem-solving. This strand of research looks at public deliberation processes and democratic and collaborative participation that brings all stakeholders' input to bear on the iterative problem-solving of value-laden wicked issues. Development of awareness and interaction are interdependent, of course. From the practical point of view it is good to focus on them separately when planning educational interventions.

The last common theme to be brought up here is the focus on *context*. Diverse cultural values, the variety of opinions of the affected public, user experiences, etc. lie at the core of wicked problems thinking. Interaction is a feature of the context but there is a lot more to it. Ritter and Webber were already noting the importance of the 'social context' and how it is becoming more heterogeneous and consequently providing "the most wicked conditions that confront us" (p. 169, Rittel, Webber 1973). An example of this kind of wicked operating context is also portrayed in Petra Vogler's article in this volume.

If universities of applied sciences, and their master's programmes in particular, want to address wicked problems together with their relevant partner communities of practice, and to provide an opportunity for students to learn to process wicked problems, educators need to harness the

power of awareness, interaction and context. This requires understanding of the competences that students need when working in the wicked world. It also needs new educational processes which are designed together with different master's programmes. The first step would be for educators to become aware of the potential of other discipline(s) and profession(s) to help solve problems in practice. The same awareness would need to be extended to users of products and services, and to the public, too. Are educators still sufficiently aware of the relevant practitioner knowledge and extra-academic knowledge? Representatives of different disciplines may notice together, for instance, that the problem cannot be solved on their level, and is better reformulated and addressed on a higher level. The awareness of other disciplines and views of the public hardly come without interaction. But it is interesting that not all interaction raises individual or collective awareness. This seems an interesting topic for further studies, particularly, because it is such a practical question, too. How do we achieve an appropriate quality of interaction that truly improves the recognition of the wickedness around us and helps us to become aware of the possibilities of reformulating the problems accordingly? One answer comes already in the development work described in Bland Tomkinson's article in this publication as he applies wicked problems approach and problem-based learning for transformative educational experiences. (See also Raisio 2010 on the nature of public deliberation and need for it.)

The context has been carried along with most of the writings on wicked problems. But by 'carrying along' it is here mean that context has too seldom afforded a more sustained investigation. The Finnish research on health care reforms and their wickedness discussed in this article is a good example of an attempt to foreground a particular context. Perhaps educators in master's programmes should look for new ways of understanding their and their students' context and imagine ways in which the relevant context could be further brought to bear on educational experiences. This would help master's students to explore contexts and develop the necessary practical creativity for processing wicked problems. One way to move towards rethinking and getting in touch with the context would be to start formulating from this a wicked problem of context together with students and staff. Devising the context together, not just in theory but in practice, would in fact determine the emphasis of any particular programme or collection of programmes (as in graduate schools and master's schools) better than any discipline or subject as such. This kind of contextually embedded educational process - of which NHTV Breda's Master's Programme in Tourism Destination Management is a good example (see benchlearning report on Breda at www.kyamk.fi/wickedproblems) - would also allow genuine reciprocal responsibilities to emerge between interacting stakeholders, so that the often problematic implementation would be taken care of automatically, as it were (see also p. 28, Conklin, Basadur, VanPatter 2007, Vartiainen et al. 2013).

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3 WICKED PROBLEMS AS A TOOL FOR LEARNING

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Figure 1. Seminar participants working with a wicked problem (Photograph: Mariia Kiseler)

INTRODUCTION

This journey starts with an idea promulgated by Charles Engel at a Symposium in 2002. Unfortunately the transcript of that session has been lost, but he has repeated the message on a number of occasions since that time (eg. *Engel* & Tomkinson & Warner, 2004). This was what Engel calls his 'ultimate challenge' and that challenge is, essentially, to higher education. The fundamental question here is 'What are universities for?' or, indeed, 'What is education for?' Taking one step back from the 'ultimate challenge', Engel points to the Brundtland declaration as indicative of the sorry state of the world and for the need of professional people worldwide to tackle the global issues raised. The role of universities then becomes one of educating those professionals for the complex tasks ahead. To recap the main challenges identified by Brundtland (1987) and her colleagues:

- The burden of debt in the developing world, inequitable commercial regulations and a growing number of the world's population living at or below subsistence level;
- Overuse of non-renewable resources, growing competition for limited water supplies and threaten armed conflict over access to water and mineral reserves;
- Reduction of biodiversity and increasing desertification;
- Pollution of air, water and soil with detrimental influences on the global environment and climate change;
- Continuing growth of the world's population, coupled with additional economic pressures caused by increased life expectancy;
- Increasing nationalistic, political and religious extremism, terrorism, armed conflict, mass migration and social disruption;
- The threats and consequences of climate change.

These are very complex issues and ones that have technological aspects as well as economic, political and social ones. In Engel's view globalization is frequently associated specifically with commerce and industry, but health care and higher education represent other examples that reach across national borders. While these issues affect human welfare internationally, they are increasingly influenced by global changes and challenges such as those identified by Brundtland. Thus global societal responsibility will require a new generation of leaders in the various professions who are able to adapt to, and participate in the management of change – not only within their own sphere of activities, but also on behalf of society at large. This would involve inter-professional and inter- sectoral collaboration in global research and long-term remediation of the many independent, global problems. Inter-professional collaboration calls for familiarity with the various professions, their "language" and their ways of thinking. To meet this challenge, higher education, in particular professional education, will need to devise new curricula and enable its educators to facilitate such wider, interdisciplinary learning.

Inter-professional collaboration in education and training is nothing new, but hitherto this has been on a small scale and essentially inward-looking. In the UK various government agencies have encouraged this, but essentially this has been in an attempt to achieve greater 'efficiency' in various sectors, notably the health service. The challenge is to focus on the problems rather than the techniques and on societal responsibility rather than inter-professional collaboration *per se*. There is still much to do, but this paper describes the beginnings and points to some of the challenges for the future.

Independently of Engel's arguments, Rietje van Dam, Vice-Rector Magnificus of the University of Leiden, suggested, at an informal meeting of academics in Graz in 2008, that a major issue for universities was that they tended to reduce the complexity of issues in order to make them simpler for students to tackle, particularly in the sciences and engineering. Added to this are the problems of mono-disciplinary approaches that educate students to think narrowly and not to look at what other disciplines might bring to a problem. Rather than giving students the tools to face complex challenges, higher education had taken the easier road of trying to simplify the problems: this means that students leave university ill-equipped to face the challenges of the modern world.

Global societal responsibility as a wicked problem

The challenges identified by Brundtland (1987) are the sort of issues that fall within Horst Rittel and Melvin Webber's (1973), definition of *wicked problems*, which have many of the following characteristics:

- No definitive formulation;
- No clear end, no 'stopping rule';
- An answer that is 'good or bad' rather than 'right or wrong';
- No immediate or ultimate test of their resolution;
- Consequences to every solution, there is no possibility of learning by 'trial and error';
- No well-described set of potential solutions;
- Essentially unique;
- Possibly symptomatic of another problem;
- Causes with no unique explanation;
- Expectations that their 'owners' will find the 'right' answer.

These are radically different to the *tame* problems with which students tend to be faced, particularly in science and engineering. In the field of global societal responsibility there is usually

an additional complicating factor, in that different proposed solutions may appeal to different stakeholders and any such solution may disadvantage certain groups in society. Choosing a solution may then become a social and political issue rather than a technical one.

Whilst individual issues of global societal responsibility can be seen as wicked problems, climate change, for example, or post-earthquake relief and reconstruction, the area itself can also be seen as complex and challenging. Moreover, Engel asserts that one of the keys to resolving these issues is that of managing change: a topic that seldom features in the curriculum. So, how does higher education take this message on board?

Transformative education for global societal responsibility

In looking at Education for Sustainable Development, Arjen Wals (2009) argues that this "calls for new kinds of learning that are not so much of a transmissive nature (ie learning as reproduction) but rather of a transformative nature (ie learning as change). The latter requires permeability between disciplines, schools and the wider community and between cultures, along with the capacity to integrate, connect, confront and reconcile multiple ways of looking at the world." This UNESCO report suggests fourteen learning outcomes for education for sustainable development across the education spectrum:

- Critical reflective thinking
- Understanding complexity/systemic thinking
- Futures thinking
- Planning and managing change
- Understanding inter-relationships across disciplines
- Applying learning in a variety of life-wide contexts
- Decision-making, including in uncertain situations
- Dealing with crises and risks
- Acting with responsibility locally and globally
- Ability to identify and clarify values
- Acting with respect for others
- Identifying stakeholders and their interests

- Participating in democratic decision-making
- Negotiating and consensus building.

These are very difficult to 'teach' in the conventional didactic sense.

Jack Mezirow (2003) describes transformative learning as '... learning that transforms problematic frames of reference' which he suggests should '... make them more inclusive, discriminating, open, reflective and emotionally able to change'. Many of Mezirow's ideas are directed towards continuing education but in essence they apply equally to other stages of education, not least to universities. Indeed, Mezirow (1997) implies that education increasingly discourages this approach to learning rather than encouraging it. Looking at Wals' list it is immediately apparent that many of the attributes sought are of skill rather than knowledge and this reinforces Mezirow's view that professionals will have to act as autonomous thinkers in a collaborative context rather than acting uncritically on received wisdom.

Wals' ideas can clearly be extended from the sustainability arena to cover wider and more complex, global issues. But, how does higher education move from identifying the problem to doing something about it? Jonathon Porritt, one of the UK's leading environmental campaigners, suggests (2013) that 'Surely one of the best ways of starting to understand the complexity of sustainability is to actually tackle a genuine problem, and to tease out the various factors and issues that are associated with potential 'answers'? Of course, one of the first lessons to be learnt is that only rarely is there a single 'right' answer, and 'solutions' almost always come with strings attached. These complex scenarios with no 'right' answer are often called 'wicked' problems, and the process of learning about the issues through studying the scenario and trying to answer key questions is called 'problem based learning...'

Problem-based learning and transformative education

Implicit in Engel's ideas is that problem-based learning (PBL) is the only way in which to tackle the agenda of skills development to achieve transformative learning. In work that he had undertaken on inter-professional education in the area of health, Engel (2002) had seen this as the most appropriate way forward. Moving on to the area of sustainable development, Rosemary Tomkinson and colleagues (2008) undertook a Delphi study into appropriate routes to educating engineers for sustainable development. *Inter alia*, this study found that student-centred approaches (eg. case studies, projects, PBL) were thought to be the most efficacious way of introducing sustainable development into the engineering curriculum. These ideas were brought together in a pilot programme, sponsored by the UK's Royal Academy of Engineering, which sought to engender sustainable development in the science and engineering curriculum through inter-disciplinary problem-based learning and the programme itself was subject to considerable study (Tomkinson, 2009a). That study demonstrated the effectiveness of the PBL approach in tackling complex challenges and in developing appropriate skills in the students. The course unit was Highly Commended in the UK's Green Gown Awards in 2008, where it obtained a plaudit from the adjudicator as being 'transformative'.

Following on from this project, an invitation Symposium was held in Manchester in 2008 to look specifically at embedding sustainable development into the engineering curriculum. A number of threads of discussion emerged but there were two principal perspectives that underpinned these. For some discussants, the question was one of broadening out the work done, on sustainable development for engineers, to a wider range of disciplines; for others the question was one of using the work done on sustainable development as a springboard for change in the undergraduate engineering curriculum. The broad outcomes of the discussions were that:

- The undergraduate engineering curriculum is in need of overhaul, both in terms of content and mode of delivery;
- Sustainable development is becoming embedded in the engineering curriculum though often in a mono-disciplinary fashion;
- A systems approach is vital for the future engineering professional, but this may be too complex for an undergraduate curriculum;
- The engineering curriculum needs to cover both knowledge and skills and a proper balance needs to be maintained;
- Learning to learn is more important that memorising facts;
- Engineers have to learn to place their professional work in context, particularly with regard to working with other professions;
- Learning together with other professions can enhance the students' abilities to place their engineering studies in context and to deal with complex issues;
- Student-centred methods (eg PBL, case studies, role play) can be effective in developing both skills and knowledge, but may have resource implications;
- Student-centred methods of learning can help improve student motivation and levels of retention;
- Curriculum design needs to be adequately resourced to be effective;
- Curriculum change needs high level champions, both within universities and also professional bodies.

Whilst some of these conclusions are particular to engineering, others presage a wider understanding of transformative education and of the need to tackle complex problems, often across disciplinary boundaries. Charles Engel, with a number of colleagues (2007), has comprehensively addressed an approach to introducing PBL in medicine and related fields and the appendices to the report to the UK's Royal Academy of Engineering (Tomkinson, 2009b) give a detailed account of how to address the implementation of PBL in educating engineers for sustainable development.

Implementing problem-based learning

Much of the early work on PBL was in revising the medical undergraduate curriculum. Although the cumulative approach taken to problems, in those instances, gradually brought in elements of complexity, the early scenarios in the cycle were usually quite 'tame' and even the more complex scenarios were directed towards achieving a 'right' answer. When PBL began to be applied in engineering the same applied and even in economics and business the temptation was to devise scenarios that would lead to a single expected answer. Laudable though these approaches are, they do not help with the issues of wickedness and of managing change: many global issues do not have a single 'right' answer. Implicit in education through PBL is that it leads to a maturation process, where students develop in skill and in confidence as they progress through exercises of increasing difficulty or complexity. The suggestion offered by Charles Engel (private communication) is that in the early undergraduate years PBL produces a degree of professional confidence, largely using simpler exercises where there is an expected answer, but that the process of maturation allows the introduction of more challenging, complex, wicked, scenarios later in the sequence or with students who have already developed some degree of professional confidence and competence (for example in Masters programmes or later undergraduate years).

The approach developed in Manchester, with the support of the UK's Royal Academy of Engineering, has attempted to address some of these issues and has itself changed and expanded over the years. In addition to the original Inter-disciplinary Sustainable Development module, which is offered by the Manchester Business School and taken by undergraduate students from across the university, though mainly still from science and engineering, units have been designed at postgraduate level both in sustainable development and also in Project Managing Humanitarian Aid. The basic principles have also been incorporated in an Engineering Doctorate programme and in the Methodological Summer School mounted at Kymenlaakso University of Applied Sciences. The approach to learning embedded in these units has been widely disseminated and for the last three years the University of Keele has been running a project, funded by the UK's National Teaching Fellowship Scheme (NTFS), with the University of Manchester and Staffordshire University, to examine how the basic principles can be extended to larger audiences, including the use to technology to achieve this. Each university took a different approach, with a different cohort of students.

This last project is still completing the later stages of analysis and evaluation, but early results show considerable impact on student learning. In terms of transformative learning, results of a questionnaire study in 2012 (Bessant, 2012) suggested that in Keele 57% of students found that the module had changed their attitudes 'Quite a lot' or 'A great deal' and in Manchester 80% and in Staffordshire 50%. Students in Keele and Staffordshire also reported changes in their behaviour towards sustainability issues (this question was not asked of Manchester students, but they reported changes in their responses to humanitarian issues). Likewise, most students suggested that a range of their professional and transferable skills had improved over the course of the module. The questionnaire results were supplemented by focus groups and nominal groups (Delbecq et al., 1975), which generally showed a favourable response from students. Earlier work in Manchester had included nominal groups with the facilitators and the evidence here was that the approach was valued by those who facilitated the learning (Tomkinson, 2009a).

The normal structure of a PBL module is for the learning to be undertaken in teams of about eight students (some, medical, courses use larger teams; some courses may use smaller teams but these can be resource-intensive) each facilitated by a specially trained facilitator. In Manchester these have been post-doctoral researchers or PhD students but some universities will employ relevant staff from outside the university: since the role of the facilitator is largely to assist with the team processes, rather than to transmit knowledge, the presence of 'experts' can sometimes be a disadvantage. The main inputs from the academic staff are in designing the module and its constituent scenarios; giving extensive feedback to students on each scenario in order to aid their learning, and assessment.

Designing PBL for wicked problems

The type of scenario with which students are presented is important and project design is not straightforward (Dobson & Tomkinson, 2012). Scenarios must be sufficiently complex and open-ended to allow students to take a range of approaches, but if too broad, such as "solve climate change", then teams don't know where to start. If too clichéd, for example, "decide if nuclear power is a good thing", then too much of the debate is already well articulated. These PBL scenarios are not traditional "business cases" or pre-solved problems, and often do not come with any supporting information – though sometimes there may be maps, diagrams or photographs to supplement the written briefs. Students must find information for themselves, based on what is currently available in the public domain and they are normally expected to make full use of relevant academic literature. David Jonassen and Woei Hung (2008) suggest three different classes of PBL problem: diagnosis-solution; decision making; situated case – policy. Medical problems to lie more in the policy making category, though with some undertones of decision-making. This has considerable impact on scenario design.

Scenarios looking at wicked global issues are designed to require the elements described below, although these are not expressed as explicitly in the project briefs provided for students.

- 1. Analysing the scenario:
 - a. What are the potential consequences in the short and long term as regards inter-related economic, environmental, social, political and technical impacts?
 - b. Which actors and stakeholders would be affected or involved? What are their positions, priorities and perspectives?
 - c. What are the conflicts of interest and ethical issues?
 - d. What are the potential benefits (incentives)?
 - e. What are the potential risks/costs (barriers to change)?

- 2. Developing a proposal or strategy (applying multi-criteria decision making):
 - a. What is the chosen remit for the project what is to be achieved from the initiative?
 - b. How can the proposed solution delivered what is the actionable implementation plan (in the short and the longer term)?
 - c. Who should be involved or consulted? What collaborations are needed to ensure implementation?
 - d. How can different stakeholders be encouraged to co-operate?
 - e. How can any barriers to change be overcome and risks mitigated?

3. Justifying the proposal or strategy:

- a. Overall, how would global society be impacted, if the scheme was successful?
- b. How does this compare with alternative initiatives that aim to tackle the same issue?

In the inter-disciplinary context, scenarios need to be discipline-neutral, so that all students are equally able to contribute, and do not try only to apply their own discipline knowledge. Topics used in modules in Manchester have been as diverse as improving flood-response in the UK, investing in developing new energy sources, introducing a real-time perishable food-status sensor to the grocery supply-chain to reduce waste, bringing "eco-funerals" into the mainstream, supplying GM maize to supplement food supplies in East Africa, and potential new pharmaceutical research to reduce the spread of HIV. Many of the scenarios have a strong international focus, for example based in the developing world. Scenarios that demand an understanding of the local culture are essential to help students learn about global diversity and social aspects of wicked problems and change, rather than only considering the environmental, economic or technical aspects. Importantly, the scenarios cannot be seen in isolation and must be devised to demonstrate an increasing degree of complexity throughout the course, cumulatively building on the learning from earlier scenarios and the consequent feedback.

Typically, the PBL process would see a briefing note issued to students in week 1, whereupon they are required to examine it and query any unfamiliar terms (in many cases the students will not have English as a first language), to agree what the problems are that they are examining, to discuss between themselves what they already know about the issues, to agree what more they need to know and to decide on how they are going to gain the additional information. Week 2 is, then, largely taken up with students reporting back, deciding what else they need to find out and deciding on what is to go into their report. In this week there may also be some feedback from a previous exercise that needs to be discussed to see what lessons can be learned, a discussion about how the team is functioning and possibly a brief exercise to reinforce the team functioning. In Week 3 the team then hand in the report or other deliverable, carry out the team review and proceed to the next scenario. In some universities this process is supplemented with 'theatre events' (lectures) or additional materials provided online. The report, presentation or other deliverable may be subject to formative or summative assessment.

Assessing student learning with wicked problems

Medical PBL has traditionally used two forms of individual summative assessment: Objective Structured Clinical Examinations (OSCEs) and Modified Essay Questions. Formative assessment is more often delivered as group feedback on the scenarios tackled. OSCEs attempt to simulate a clinical situation and to assess an individual student's approach to a patient presentation; MEQs attempt to simulate the PBL process by setting down a problem scenario and leading the individual student through the various stages to arrive at a conclusion. When looking at wicked global problems these approaches proved inadequate. Different approaches have been used, but the essential element of assessment applied to transformative learning, indeed to any learning, is that it should be 'authentic'. This means that the assessment should mirror the stated learning outcomes. In the context of transformative education the outcomes will incorporate some element of changes in attitude and approach as well as the development of skills and the accrual of knowledge. One element common to the three universities in the NTFS project has been the use of individual reflective reports, logs or diaries. The intention here is for the students to reflect upon their own learning; not only providing a source that can become the basis for assessment, but also developing their skills in learning to learn. If done well, such a document can demonstrate the transformative learning. Different universities apply different levels of 'scaffolding' to the reflective reports: some requiring interim reports so that progress can be monitored, some providing hints or questions to aid the reflective process. In Manchester, the students have a videocast and a written guidance note relating to reflective practice and are given weekly tips about things to reflect on in their logs - these tips relate to process issues that may have been discussed in team meetings.

In addition to individual pieces of work that may be marked (some PBL courses still lead to an examination but this is generally inappropriate), there is also a number of pieces of group work that may be assessed. Typically this would be a written report from a group, but might also be a presentation, a video, a poster, a wiki or another format or a mixture of these. This would attract a group mark and in many instances this would be moderated by peer, or possibly supervisor, assessment. Peer assessment not only allows students to reflect the different contributions made by group members, and thus distribute the group marks between them, but also to reflect on their own contributions and to develop skills of assessing their own work and that of others.

Does the use of 'Wicked PBL' work?

In an earlier paragraph some of the evidence from the NTFS study was elucidated to demonstrate that the approach could be transformative. But there is one key element here that may sometimes be missing and that is that most of the trials undertaken have been with groups of students from different disciplines. This reflects the need for inter-professional approaches to tackle key problems in the world, in business and commerce, in science and engineering, in politics and government, as well as in sustainable development and humanitarian aid. The evidence coming out of the NTFS study (Bessant, 2012) indicates that students are developing new skills and strengthening ones that they already possessed, thus facilitating their chances of employment, as well as undergoing a transformative process of education that enables them both to reflect upon complex problems and also to take part in the essential management of change to achieve workable solutions to those problems. These results echo those found in the earlier study in Manchester (Tomkinson, 2009a)

CONCLUSIONS

There is a perception that universities have a role, even a duty, in educating future professionals to tackle wicked global problems of societal responsibility. However, universities are generally ill-equipped to do this because they have moved towards simplifying issues so that students can 'solve' them and away from allowing students to tackle complex issues. To adjust to these complex challenges requires a new educational model, a transformative educational model, and this is best done through using problem-based learning with complex scenarios based on wicked problems, preferably with students from different disciplines working together. Evidence from running modules of this nature suggests that students can learn to tackle complex problems in this way; that, in this way, they can develop 'soft' skills that are of importance to future employers, and; that they appreciate the mode of learning that underwrites it. This mode of learning need not be confined to the complex problems of global societal responsibility, but can also be applied to studies in science and engineering, in business and commerce and in any area where the real world has such a degree of complexity that its challenges may be seen as *wicked*.

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4 INDIAN PERSPECTIVES OF INTERCULTURAL CHANGE MANAGEMENT

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"We have already asserted that interculturality is the philosophical imperative of our times. But we have mentioned a twofold temptation: monoculturalism and multiculturalism." (cf. Panikkar 2000, 78).



Figure 1. Petra Vogler at Wicked World Seminar 2013 - The Wickedness of Knowledge Sharing in Complex International Organizations: the Relevance of Learning Styles from an Indian Perspective (Photograph: Mariia Kiseler)

INTRODUCTION

There is no doubt that intercultural exchange is a global phenomenon. The depth and intensity of such exchange, however, varies significantly depending on the historical period and the respective cultural contexts. The extent to which the Indo-European dialogue was able to influence the past millennia, for example, is only hinted at here. But today, there is more interest in how, for example, the Indian perception of the "new Europe" now looks in a multi-polar world, how the role of the previously known duality of the rational self and the irrational others has changed in this European/German-Indian perception, and how the process of change is conceived, and what implications this has for current perspectives of intercultural change management. The question of designing a type of intercultural change management, which is appropriate to the cultural context, i.e. the implementation of intercultural thinking and practices into the everyday work of companies as a measure of change management, meaning all processes of global change, whether through revolution or planned evolution (Reiss & Rosenstiel & Lanz 1997, 9), is closely related to the attitude to change and change processes in the respective cultures. In the world of business, the attitude to change has decisive influence on the effectiveness and chances of success of change management activities. Only a change management that is willing to question its understanding of a middle way between a corporate culture that is becoming globally standardised and a work culture that takes local cultural values into account, and also opens the "deconstruction" in the Derridian sense of attitudes and concepts like a sphere of inquiry, will be able to bring about longterm and successful cooperation at the international level. A middle way does not mean the narrow understanding of a degree, positioned between two possible alternatives, such as those of the local and global work culture, but it is rather seen as a surface in the Heideggerian sense of "appearing" (cf. Heidegger, 1960), and is defined by both parallelism and the oscillation of various positions.

The attempt at networking the ideas of intercultural philosophy, that emerged in the early 1990s and sees itself as a new kind of philosophy with interculturalism as a central theme, with the basic assumptions of intercultural management (with reference to the situation in Indian culture), and thus every area of today's global business world, which will become increasingly important in the coming years for the corporate world with its cross-border and cross-cultural characteristics, is the main topic of this essay. The concept of intercultural management includes all measures that are geared so that a company's employees work together with colleagues, customers or partners from different cultural backgrounds with understanding and purpose, but today the feasibility of the approach is being increasingly questioned. I would like to give the content and the claim of the area of intercultural management a more complete foundation, in general and also with particular reference to application in Indian corporate culture, especially the sub-field of intercultural training, in order to curb the risk of exploiting training for purely "getting ready for doing business at an international level". Particularly critical of this development from an Indian perspective is the Indian philosopher Vincent G. Furtado. In his opinion, in India this would merely mean "producing suitable students for the labor market, in which it is only profit that counts" (Fornet-Betancourt 2004, 227). This production of effective employees is then continued in the world of work. "Given the predominance of instrumental reason, which proceeds purely strategically and is based on the efficiency of economic models, intercultural philosophy is challenged with comprehending the specific historical experiences, the symbolic networks of living environments, and the dimension of ecological, ethical and political beliefs as internal moments of a philosophical mode of thought (and not merely as aspects which are still to be considered)" (Gmainer-Pranzl Book Review 2005, 148).

At a time when training providers of intercultural services are sprouting like mushrooms, the question of the meaning and quality of the sector is increasingly raised.

LINKS BETWEEN MANAGEMENT AND CHANGE

The question of connecting points of management and change is based on a fundamental analysis of change management. Following on from Michael Reiss' question: "What is change?" "What is management?" and "What links between change and management are relevant?" (Reiss & Rosenstiel & Lanz 1997, 9), I especially see the greater dialogue of philosophy and economics as an option to provide possible solutions to the question of these linked areas between change and intercultural management. The following areas are subsumed under the term of the nature of change: 1. Strategy change, 2 Resources change, 3 Structural change, 4 Company change (Reiss & Rosenstiel & Lanz 1997, 7 et seq.). It is well-known that change management is understood as "all the processes of global change, whether through revolution (i.e. corporate and business transformation) or evolution (organisational development)" (Reiss & Rosenstiel & Lanz 1997, 15). The question of management understanding, which is compatible with the nature of change, thus calls for the development of a hybrid model between transformation and evolution (Reiss & Rosenstiel & Lanz 1997, 10). Reiss provides three answers here: 1. Change as a condition (social and market-based frameworks), 2 Change as a goal (optimal company development through growth, shrinkage, restoration, revitalisation, etc.), 3 Change as an instrument (strategic and operational management instruments - until now, Reiss has assumed two possible answers: 1. All management is change management, so a manager is always a change manager. 2. Change eludes any kind of management (Reiss & Rosenstiel & Lanz 1997, 13 et seq.).

So, I will pursue the question, mainly using the example of intercultural management: "What is global change management in the field of intercultural management" and "what challenges do we face in intercultural management processes today"? Here, the minds seem to differ. Keeping up with the pace of change at the organisational strategic level is not an easy task and, due to conflicts between different stakeholder groups, is also usually an extensive procedure. Reiss de-fines lack of knowledge (not familiar), excessive demands (not able), disadvantage (not willing) and powerlessness (not allowed) as the main challenges and resistances, which determine the areas of change management today (Reiss & Rosenstiel & Lanz 1997, 17). I would like to give further consideration to the existing change management strategy of intercultural management in Indian culture.

A MODEL OF INTERCULTURAL MANAGEMENT BASED ON INTER-CULTURAL PHILOSOPHY

"Monoculturalism is lethal and multiculturalism is impossible. Interculturality recognizes both assertions and seeks a middle way" (Panikkar 2000: section 93).

One often gets the impression that there will be no adequate description of what is now an inter-cultural management approach, and to what extent this assumption now differs from the approaches of cultural pluralism, integrationalism or assimilationism. Culture understands the flow of interculturalism as a dynamic system which is based on the pillars of exchange and dialogue of various cultural groups, and assumes the possibility of mutual enrichment. Against the back-ground of the different diversity approaches (inter alia Triandis & Berry 1980, Hofstede 1980, Trompenaars 1993, Hall 1983, Inglehart 1997, Schwartz & Bilsky 1987, Triandis & Bhawuk 1997 etc.) and similarity approaches (characterised by terms such as third culture, synergistic culture, mental models, hybrid and transcultural culture - mentioned here are Graen & Hui 1996, Graen & Wakabayashi 1994, Adler 1991; Earley & Ang 2003 etc.), which determine the current discussion in the field of intercultural management, it should be mentioned for the understanding of this paper that "in the present context, the cultural orientations of individuals and not the (alleged) characteristics of collectives (national character) form the starting point of the considerations" (Flechsig 2000, 1). Firstly, Flechsig represents the idea that the approach of intercultural dialogue refers to the change and development of the cultural orientations of individuals, which, of course, can also affect populations, but does not have to; secondly:

"... it is still widely believed that the cultural orientations of people can be derived from their belonging to just one culturally homogeneous population (...). At the same time, they can also feel as if they belong to a generation culture, an organisational culture, a world view, a religious community or a profession (...). This means, however, in specific situations of international co-operation, that it is not only the interests and mandates of organisations that come together, but also always - or even primarily - people as complex cultural personalities" (Flechsig 2000: 1).

In trying to understand cultures, Sinha & Kumar (2004) refer to the danger of generalising evaluation criteria, and also the interpretations and "beliefs" of foreign cultures. In their view, a number of Indian researchers took examples of Western constructions of Indian culture and personality (cf. Taylor 1948; Narain 1957) and raised them to the level of national phenomena. The latter examined the events of Indian history, political slavery and child rearing, and concluded from it the existence of certain national characteristics for "the Indians":

"...absence of commitment, which at an individual level expresses itself in freely made but unfulfilled promises, and an absence of sustained efforts for realizing collective objectives; inability to handle emotions that are either suppressed or burst into uncontrolled temper tantrums; contradictory behaviours that manifest themselves in a tremendous gap between ideals and performance. Truth is extolled, but all kinds of falsehood are practiced; honesty is valued, but dishonesty is rampant; kindness is virtue, but Indians laugh at others' physical deformity...; Indians are spiritual, but their greed for material things is insatiable' (Narain 1957: 130)" (Sinha/ Kumar 2004: 91). What is intercultural and, at this point, the concept of interculturalism include the view that ethnic and cultural factors exchanged factors which influence interpersonal relationships (factors of a political, economic, social, gender and age-specific nature) with others insofar as they searched for elements of mutual enrichment in the differences. Here, "mutual learning" is an important aspect; a central idea is to find and highlight things that unite us, not those that divide us. The aim is a fundamentally open attitude of society and individuals, as well as intercultural behavior in their own and in the foreign culture. Intercultural philosophy may be a possible orientation framework for intercultural management and its activities in the global economy. Here, we intro-duce a further foundation for the "reasonable" co-existence of ethnic, cultural and religious majorities and minorities. Forms of action and thought, which determine, inter alia, intercultural management training programmes must take responsibility for making staff of the corporate world competent in the new requirements and expectations of an intercultural global economic community. Important is not only the approach of getting deeper access and a more comprehensive understanding of people from other living environments through improved mutual communication and interaction, but rather also that of taking the factor of interculturalism to all levels of an organisational structure, local and global, by dealing with various culture-specific and general philosophical issues. Special attention should be focused on implementing intercultural competence through intercultural training and coaching.

Thus, approaches of intercultural philosophy appear particularly important to me in the question of a meaningful basis of intercultural management and, consequently, also in the corresponding development of training approaches and methods. The knowledge of culture-specific, appropriate teaching and learning forms and methods is a challenge precisely in the area of intercultural training. As Raúl Fornet-Betancourt (1998) points out, intercultural philosophy first makes a contribution in the disclosing of what is concealed in a system and made invisible. The intercultural dimension is not confined to "information" or "enrichment", but it urges comprehensive change, a "transformation," says Raimon Panikkar (Fornet-Betancourt 2004: 29). In intercultural dialogue, cultures are in a dynamic process of exchange, and they work together to find new ways of living together in a multicultural global society. Transformational and cultural changes can only succeed if there is interaction between, and mixing of, different cultural orientations.

I refer to Fornet-Betancourt's model as the main model of intercultural philosophy, which is to be proposed here as the basis of intercultural management. His suggestion, away from a mono-cultural philosophy model and towards a radically innovative intercultural transformation of philosophy, has the task today of creating a new design in the form of an intercultural philosophy, in the face of new knowledge and cultural constellations. In his opinion, intercultural dialogue in today's era of globalisation is a programme to develop an "alternative response" that "wants to propose transformation and reorganisation of the universality of the world on the basis of mutual cooperation and communication between the different cultural regions of humankind" (Fornet- Betancourt 1998: 158). He sees this as an alternative to the hopes of all those who still "envisage other possible worlds" today. The deeper meaning of intercultural dialogue is thus in the desire for an opening up, or breaking away from, the previously valid cultural systems (conceptual, symbolic and moral), in order to restructure the applicable universality, to put traditions into perspective, and to contribute to reflection on specific cultural orientations. It thus also becomes clear that, for him, intercultural dialogue is an "option for hope" today.

Fornet-Betancourt lists 7 characteristics (Fornet-Betancourt 1997: 59 et seq.), which are indicative of the new form of intercultural philosophy, whose importance for intercultural management, particularly in Indian culture, will be discussed directly following each of the individual points.

I. An intercultural redesign of philosophy means a creative redefinition of philosophical possibilities, which would be developed in a cultural area, which is not dominated or colonised by any cultural tradition.

Intercultural management in India is searching for a form that is appropriate to the cultural con-text. In doing so, a decisive role is played by a "reformulation of the means of knowledge through exploration of the voices of reason or of cultures in open communication" (Fornet-Betancourt 1997: 114 et seq.). Experience of the modern corporate world shows that perceptions of an ontological and epistemological distinction between the "Orient" and the "Occident" still dominate and determine the sphere of collaboration of most people, despite moving closer together spatially. Personal interaction with externally ascribed, supposedly "culture-specific" behaviour and forms of communication is just as much a challenge as the permanent balancing of inner feelings and interpretations of attitudes and expectations of others. Sarukkai's assertion that "lived experience is not about freedom of experience but about the lack of freedom in an experience" (Sarukkai 2007: 4045), is of distinct importance, particularly in interpersonal intercultural experience. This lack of freedom in the lived experience itself creates the need of people to find their bearings in a continuous balancing act of oscillating visions, namely that of Eurocentrism and that of Asiacentrism, of the East and the West, of the Occident and the Orient, etc., and to work on the "deconstruction" of this form of cultural dichotomy in their own thinking.

"Those who have written on the importance of cultural divisions have been right to point to them, and yet the attempt to see these divisions in the over-aggregated form of East-West contrasts hides more than it reveals" (Sen 2005: 137).

Still, the pure enabling of making experiences ultimately says nothing about the depth and quality thereof, and thus necessitates the separate addressing and debate of the long-held and complex "vision Orient", whose interpretation can take many different forms. The fragmentation of rigid and fixed images, which are passed down through generations and which are now transported in the everyday life of our economic cooperation, is one of the most important tasks to be addressed by intercultural management. We develop our ideas, and consequently our cooperation, depending on how the world and the lives of others appear to us. Hsu (1963), for example, calls the Chinese situation -centred, the Americans individual -centred, and the Indians supernatural-centred (Sinha/Kumar 2004: 92). Perceptions are steered and determined by this categorisation and nationalisation of character traits and behaviours.

Especially in the field of Indian intercultural management, we mainly find a strong orientation towards Western models. Thus, in the context of former colonised cultural regions, a constant preoccupation with the historical past, i.e. especially with the respective colonial history, is indispensable. Here are just a few excerpts of the personal valuations of the "oriental spirit and essence" from the perspective of Lord Cromer.

"Sir Alfred Lyall once said to me: 'Accuracy is abhorrent to the Oriental mind. Every Anglo-Indian should always remember that maxim.' Want of accuracy, which easily degenerates into untruthfulness, is in fact the main characteristic of the Oriental mind" (Said 1978: 38). Cromer never made a secret of the fact that, for him, Orientals were merely "human material", which needed to be governed. He thought, for example: "...I content myself with nothing the fact that somehow or other the Oriental generally acts, speaks, and thinks in a manner exactly opposite to the European" (Said 1978: 39).

At this point, I would like to draw attention to the long-term powerful effects of such traditional evaluations, interpretations and judgements. The broad research field of Orientalism tried to analyse and discuss academic, imaginative and historically relevant definitions equally. The Asiacentric research orientation, here the communication research methodology of Miike, can be understood as a counter-position. His theory of human communication should be mentioned here. Henze quoted inter alia Miike's five "Asiacentric research objectives":

"(1) to critique misleading Eurocentric studies of Asian communication behaviors; (2) to preserve Asian cultural values and modes of communication; (3) to explore spiritual liberation through communication; (4) to depict multiple visions of harmony among complex relationships; and (5) to examine (inter)cultural communication needs and problems seen through Asian eyes. These interrelated research goals are designed to systematically advance the Asiacentric knowledge of human orientation (see. Miike 2003: 40)" (Henze 2007: 304).

Furthermore, Henze emphasises three key assumptions on which Miike founded the Asiacentric paradigm of his communication theory: "1. The ontological assumption for an Asiacentric paradigm is that everyone and everything are interrelated across space and time (...). 2. The epistemological assumption for an Asiacentric paradigm is that everyone and everything become meaningful in relation to others (...). 3. The axiological assumption for an Asiacentric paradigm is that harmony is vital to the survival of everyone and everything (cf. Miike 2002: 6)" (Henze 2007: 306). Comparably, Indocentric assumptions increasingly emerged in the past regarding the general forms of existence that were typical to cultures. As for the construction of such portraits of Indian culture, the results of a research study, which obtained its derivations from ancient texts and scripts, should be mentioned. Three main themes that constituted "Indian affairs" emerged from this: cosmic collectivism (a world view according to which the universe consists of various forms of animated and unanimated elements that are interconnected by an underlying sense of unity, called Brahman or ultimate reality), hierarchical order (the assumption that the universe and everything in it is hierarchically organised) and spiritual orientation (the striving for perfection through spiritual practice is regarded as an individual task and can therefore be mainly regarded as an individualistic duty (Paranjpe 1988)) (Sinha/Kumar 2004: 92). Intercultural man-agement has no choice but to deal with the question of designing an intercultural philosophical base, which grants the respective cultural groups their own language and an "articulation of their own logoi". On the one hand, this is about the setting of ethnocentric attitudes, and on the other hand about the critical questioning of a blind adoption of concepts that have been developed in other cultures. This approach has gained particular importance in the field of intercultural management in Indian culture, since it demands the radical questioning of practised basics.

2. Philosophy should be understood as an open process, which incorporates philosophical experiences worldwide and thus dissociates itself from comparative philosophy.

Distancing from comparisons also always means having already experienced the possibility of recognition from one's own perspective. As long as the struggle for recognition determines the relationship, the tendency will prevail to establish ontological principles in order to ensure its own existence. With respect to Miike's ontology of Asian human communication, Henze describes this phenomenon as follows:

"This triad of culturally spatial otherness (relationality, circularity and harmony) designs for Miike an Asiacentrism that emphasises differences with the Western world, in order to establish the existence of a theoretical alternative to the dominant Euro-American view of the construction of Asian otherness. While Asia appears as a rather homogeneous area of communication in which - despite some dominant religious orientations - communication in social communities is characterised by the simultaneity of relationality, circularity and harmony" (Henze 2007: 306 et seq.).

The attempt to overcome a polarising and comparative approach in Indian history is explained in the example of "Design Pedagogy". Singanapalli Balaram emphasises the achievement of the National Institute of Design in recognising the outstanding aspects of design pedagogy from around the world, in order to emphasise the positive aspects of the vision "unity in diversity". Balaram vigorously refuted the reproach that India's traditions of oral tradition and religious mysticism were associated with a lower appreciation of rational and scientific thinking by referring to the traditional canonical organisation of teaching and fields of knowledge - e.g. there were specific systems for the teaching of sculpture Shilpa Shastra, dance Natya Shastra, music Sangeetha Ratnakara and architecture Vaastu Shastra (Balaram, 2005: 11 et seq.). Here, a similar possibility for discussion in the field of intercultural management could be a stronger link back to own cultural traditions (e.g. as the attraction of Bhagavadgita already practises for the training of Indian managers, etc.), but without falling into the trap of a culture-centric view.

3. Furthermore, intercultural philosophy is new, as it is turned against a possible absolutism of the self in a culture, and, in turn, stands for cooperation and exchange.

Here, we refer again to the danger of ethnocentric attitudes in conceptual and practical areas of intercultural management. In today's era of rapid transformation of the socio-cultural reality of the Indian subcontinent, it is probably appropriate to question which images and prejudices there are towards people from certain countries and cultures (relative to domestic and foreign) in one's own country and also beyond one's own country to other countries, and to what extent this is influenced and changed through cooperation in a multicultural corporate context. Does the "Western world" still tend to perceive the "Orient" as a static and incorrectly represented image, and vice versa? Can we still speak today of the desire of the "enlightened West" for economic domination of the "mysterious Orient"? Does the fact that certain professional groups operate on various "globalisational scapes" (Appadurai (1991) assumes the existence of various global "scapes",

which he calls "ethnoscapes, mediascapes, technoscapes, financescapes and ideoscapes), really lead to a changed perception of the dichotomy between the Occident and Orient? Do representations of India in Europe, and representations of Europe in India, still largely prevail in rigid schemes?

In this context, D. Sinha emphasises:

"The values and behaviour are frequently attributed to Indians, according to a review by D. Sin-ha (1988), include fatalism, passivity, dependency, paranoid reaction, narcissism, insecurity, anxiety, authoritarianism, submission, indifference to contradictions (i.e., lack of rationality) and so on. The trend of relating personality and culture has continued in India (Nandy/Kakar 1980) and elsewhere (D'Andrade 1990; Lee & McCaulay & Draguns 1999)" (Sinha 2004: 91).

Will the field of intercultural management succeed in creating a safe learning and teaching culture, in order to address the risk of reviewing more convenient and known patterns of thought, and to allow for an opening of ambiguous interpretations? How do we "deconstruct" authority, and thus attributions and prejudices, in the context of international cooperation in sensitive way? How do we deal with representations of cultural patterns and the identification with, and embed-ding of, ourselves therein? Breaking absolutism in the minds of people, opening them up to each other for a creative form of dialogue, and facing a one-to-one projection of our own expectations, are great demands on the field.

4. It is also new because it "rejects any restrictive hermeneutic attitude" and does not want to be based on a general model, but rather incorporate a new interpretation of the self and the other in its development process, taking into account many different voices.

Precisely the field of intercultural management, which has the duty of developing a differentiated and thorough description of the concept of interculturalism, is surprisingly often limited by choosing fewer concepts and concepts which come from one culture, and thus risks failing in its effectiveness and ability to be understood. Sinha/Kumar (2004) criticises, for example, that the reductionist approach used in the West represents such a narrow microscopic view, that only fragments of the Indian reality could be brought into focus, which are therefore often trivial and meaningless. The claim of Western theories and concepts of universal validity are therefore untenable in the Indian context.

"The roots of the inconsistent findings was partly located in the use of alien concepts (e.g., caste was equated with race, communalism with anti-Semitism, and untouchables with American Blacks (see Nandy 1974) and was partly methodological (J.B.P. Sinha 1973)" (Sinha/Kumar 2004: 96).

The choice of the appropriate approach to the study of a particular cultural context plays a fundamental role. In their methodology of Indian cultural understanding, Sinha/Kumar emphasise the need for critical review and reflection of the following approaches: 1. The Culture-Personality Approach, 2. Inferences from Texts and Scriptures, 3. The Reductionist-Positivist Approach, 4. The Human Relations-Oriented Approach, 5. The Etic Approach (Sinha/Kumar 2004: 90 et seq.). A "middle way" is to also be found when analysing the results of these five approaches. The difficulty in this is illustrated by the following excerpt:

"The etic approach suffers from a number of limitations. The approach that is started from one culture and "imposed" on other cultures is likely to turn ethnocentric (Nisbet 1971) and may be guided more by the desire to prove the universality of theories and concepts than by their relevance (D. Sinha 1998). Further, the ethics do not always have construct and metric equivalence (Hulin 1987). Construct equivalence means that the concept carries the same meaning and its measurement holds the same relationship in all the sampled cultures. Metric equivalence implies that the individuals having the same score on a dimension, irrespective of the level of their cultures on that dimension, have the same probability of endorsing that dimensions. There was plenty of evidence that neither of the two criteria was always met" (Sinha/Kumar 2004: 96 et seq.).

So how do we succeed in the field of intercultural management in cultivating the willingness for uncertainty of own positions on the one hand, and the retaining of own beliefs on the other hand? Which theories are applied and in which form are cultural standards or dimensions included in the discussion in this context? As is known, most of the cultural dimension studies were conducted by Western researchers, who either divided cultures into groups or placed them on polar dimensions. In revisions of some study results on the nature of Indian culture, it transpired that some cultural dimensions neither coincided with those of organisations, nor provided any information about organisational practices or behaviour of the people. The Indian culture was evaluated as a collectivist culture, while "the Indians" were also found to be collectivist and individualistic at the same time because they showed both sides in their behaviour and actions (Sinha et al 2001; Sinha et al 2002.).

The consideration of teaching and learning traditions, which are common in a particular cultural area, determine to a large extent the success or failure of a process. For example, the choice of culturally specific recognised methods can determine the motivation of the participants to a large extent. At this point I would just like to refer to the rich past of Indian learning traditions, which must be considered in order to assess the learning and teaching situation within a company. The "hearing" - Śruti or Shruti (Sanskrit, "heard"), which dates back to the Hindu scripture of the Veda of knowledge "heard" by wise men, which was originally transmitted orally for centuries in the form of songs and recitations, and was only recorded in writing from the 5th Century AD as well as the "remembering" - Smriti (Sanskrit, "that which is remembered"), which refers to a canon of Hindu literature, has higher value, as the wise men "heard" the content directly and was therefore regarded as revelations - enjoy particularly high value in the Indian tradition of learning. These forms of learning still exist even today, although perhaps no longer explicitly, and influence the way of teaching and learning. The role of the trainer or teacher plays a key role here. This raises the question of whether the teachers themselves are imbued with multi-rational dynamics and openness, and how willing they are to surrender to the process of perpetual self-questioning and a shaking up of their own knowledge and their own truth.

5. Characteristic of intercultural philosophy is also its decentralisation, anti(Euro) centrism and its detachment from a unilateral and exclusive interpretation, but without devaluing one's own cultural sphere. The idea of developing interdiscursive reason is important.

One of the most famous examples of the development of interdiscursive reason in Indian mythology is probably the dialogue between Krishna and Arjuna on what is morally right. The following story is told in the Bhagavadgita (Radhakrishnan 2006), part of the Mahabharata: The night before the big battle, which is the central event of the Mahabharata, they both have a dispute in which Krishna emphasises the moral duty of man and Arjuna is reminiscent of the negative consequences of an action and therefore calls for the prevention thereof. Arjuna asks whether an action would be deemed moral if one only obeyed for the sake of the justice of one's own duty, and was indifferent to the human suffering caused by war. Krishna contradicts Arjuna and underlines the imperative duty of the people and the priority of their exercise without looking at the consequences. He urges Arjuna to fight, regardless of his weighing of the consequences. But the dispelling of doubts of Arjuna, especially saying that one should not think of the result of an action, but of the mere fulfilment of duty, which is so important for the Hindu philosophy, is resumed in the post-war scene and critically reflected. Here Arjuna undergoes profound doubts of justification, so in the end both sides retain their validity and their way of rational argument. The special thing about this debate is that there are two reasonable positions, which are both represented with care and sympathy (Sen 2005: 3 et seq.). At this point it should be noted that Lannoy (1971) claimed that "Indians" followed a non-sequential logic. This is demonstrated by the fact that actions were not judged on the basis of the results they produced (e.g. nishakam karm), but rather for their own sake; nor would the actual and the ideal be separated (Sinha/Kumar 2004: 92).

"It is a polyphonic process of the highest degree, in which the coordination and harmony of different voices takes place through the continuous contrast to the other and the continuous learning from its insights and experiences (Panikkar 1990: 71 et seq.)."

It is therefore likely that the idea of a philosophy of intercultural management, which is appropriate to the cultural context, is open to the "polyphony" of the diverse voices, and follows an approach that does not primarily want to be compared with other models in the sector, but rather tries to become trained organically and specific to the company and location in Indian culture, will find fertile ground.

The idea of Indian "unity in multiplicity" and the subject of communication are fields to which Raimon Panikkar has dedicated his life.

"...We can use language to communicate with one another or to wound each other. Many people use language mainly to convince the other person – to win. Others are only prepared to think in their own language and through lack of communication with outsiders impoverish themselves. However, you can also use language to have a real conversation, a dialogue, when you use words to get through to the common spirit." (Panikkar 2004: 3).

The relationship of language and communication, which Panikkar highlights here, can be extended to the field of communication in general. Any kind of communication, be it verbal, nonverbal or para-verbal, has the potential for misunderstanding and conflict. On the same subject, Henze quotes the statement by Chen and Starosta: "In other words, the key to an effective human communication (...) is to understand that differences exist in the similarity, and to pursue the unity from the differences (cf. Chen and Starosta 2003: 5)" (Henze 2007: 307).

6. Another novelty lies in the possibility of a permanent dynamic transculturation and mutual enrichment, in which we both transport our traditions while allowing other traditions to be transported to our area at the same time.

The challenge of the "permanent dynamic transculturation" of the field of intercultural management requires a detailed analysis of our perceptions. The "dissimilarity of perceptions" (Sen 2005: 140) has always been one of the important features of Western interpretations of Indian culture. In the characterisation of India, we are not dealing with, as Said said (1978), a consistent and uniform Western view, but rather with many different forms of Western interpretation. Are we, therefore, able to adequately reflect and analyse our perceptions or experiences, knowing that these are not unswerving? At this point I would like to address the question of what it means for the intercultural context to bravely open up the inexhaustible nature of perception, and to ask whether the world exists as it appears to the sensory perceptions. Given the inconsistency in sources of truth(s), can we live with our perceptions, even if all of this means questioning faith and trust in the senses? Sankaracarya questions the belief that the diversity of the world exists and indeed exists as it appears to people, in the way that the sensory organs appear to confirm their everyday perceptions. A description of one of his experiences in this regard can be translated as follows:

"In the midday sun on the beach, something shines like a silver object; on closer inspection the silver object turned out to be a seashell. The second perception contradicts the first perception. Philosophy must take account of this error in perception. For Sankaracarya, an idealist philosopher, the cause of the error lies in the subjective perception of the individual and the nature of their sensory organs. They are designed so that they project a silver object onto the seashell, creating a false perception. Only a closer look quashes the false perception or illusion, making room for the proper knowledge. Similarly, people project a lot - and that also often means incorrectly – onto the One, which is called the Brahman, and they see therein an indiscriminate Brahman, or, if we use an approximate match in Western discourse, they see therein the diversity of the world in indiscriminately universal consciousness" (Gunturu 2000: 148 et seq.).

7. The achievement of universality, which strives for a cohesive recognition of different universes of our world, is also a new aspect of intercultural philosophy.

These necessary real encounters of different rationalities, access to other forms of understanding, need to find stronger consideration and expression in everyday intercultural management. Thinking in its entirety, as can be described, is characterised by a different approach to immanence. Fornet-Betancourt believes that philosophy should be determined at the methodological level of both interdisciplinarity, i.e. the method of consulting, as well as of interculturality, as a new form of solidarity and exchange between cultures (Fornet-Betancourt 1997: 128). Does intercultural management not need more thorough exploration of topics such as "contextuality", "culturality" and "historicity" in order to counteract the pure unreflected adoption of a body of thought or one-sided importation thereof? The close connection between self-image and self-identity and colonial history in India is emphasised in the following example:

"...the self-identity of post-colonial societies is deeply affected by the power of the colonial cultures and their forms of thought and classification. Those who prefer to pursue a more "indigenous" approach often opt for a characterization of Indian culture and society that is rather selfconsciously "distant" from Western traditions. There is much interest in "recovering" a distinctly Indian focus in Indian culture." (Sen 2005: 139).

Fornet-Betancourt therefore finds: "We should not start with the dialogue itself, but with the question of the conditions of the dialogue" (Fornet-Betancourt, 2001: 177) particularly relevant. This idea seems particularly relevant for the development of intercultural management approaches in India. Fornet-Betancourt also calls for a draft of a form of rationality which extends beyond the limits of our theory of understanding, which allows for a change of perspective insofar as it would give us the chance to see the world from the perspective of others.

Perspectives of the Indian working and living environments are described using two examples. When speaking in the Indian cultural area of aspirational goals, as one mainly refers to the fulfilling of social matters, such as being a good person, considering the welfare of others, fulfilling one's own duty to help others, and being able to win affection from older people (Sinha / Kumar 2004: 97). For the Indian context, it has been empirically proven that people who closely follow the nishkam karma approach, which means serious work without expectations, experience comparatively less work-related stress. The traditional construct of the three gunas (temperament forms) was confirmed in a study that showed that sattva (purity in thoughts and actions) has a beneficial effect, while tamas (darkness or idleness) and negative rajas (stress) had a debilitating effect on managers' work ethic and personal and organisational effectiveness (Sinha / Kumar 2004: 99). It is not only the ability to unite different attitudes and to harmonise diversity as well as contradictions, which form inter alia the strength of traditional Indian philosophy.

CONCLUSION

"The reciprocal relationship is a cosmic duty." (Estermann 1999 151).

Basic beliefs of intercultural philosophy flows can support and enrich intercultural management concepts. The basics of traditional Indian philosophy may be of particular importance here. For example, the figure of Lord Shiva is a symbol of the world origin, as the essence of the Vedas and as one of the most powerful deities of Hindu mythology, both creator of the dance (Nata-raja) of destruction and liberation - Roudra Tandava - as well as the dance of joy - Ananda Tandava. Ignorance is buried under his left foot and life-giving water springs out of his head. Lord Shiva is the reproductive power, which creates, destroys and renews. Freedom from ignorance is the highest achievement of humankind. As Nataraja, creator of the dance, he stands for the connection of things, for the constant forms, dissolution and reassembly of the world. This topic, however, could be discussed in detail in a different context.

The concept of a "contextualised and philosophically profound form of intercultural management", which is presented here, can be discussed in the context of India's business world. The objectives of philosophical reflection of the intercultural concept in the context of intercultural management are certainly the highlighting of indigenous and local cultural patterns on the one hand, and, on the other hand, the design and maintenance of a corporate culture, which corresponds to local and global needs alike. We can say that employees of every company in the corporate world today are trained in the ability to perceive the voices of culture(s). International economic cooperation should be and must be more than pure business; it is also an expression of "cosmic justice", and this "cosmic balance requires the reciprocity of actions and the comple-mentarity of actors" (Estermann 1999: 151). One-sided relationships, i.e. an imbalance of complementarity, whereby, for example, on part is too active and the other remains passive, can only be detrimental in the long term. How the corporate world will deal with difference in multicultural virtual teams in the future, and how they will use this as a strength, are and remain the central issues in international organisation development. Satyajit Ray has dedicated the following lines to the celebration of difference:

"What should you put in your films? What can you leave out? Would you leave the city behind and go to the village where the cows graze in the endless fields and the shepherd plays the flute? You can make a film here that would be pure and fresh and have the delicate rhythm of a boatman's song. Or would you rather go back in time – way back to the Epics, where the gods and the demons took sides in the great battle where brother killed brother and Lord Krishna revivified a desolate prince with the words of the Gita? One could do exciting things here, using the great mimetic tradition of the Kathakali, as the Japanese use their Noh and Kabuki. Or would you rather stay where you are, right in the present, in the heart of this monstrous, teeming, bewildering city, and try to orchestrate its dizzying contrasts of sight and sound and milieu?" (Sen 2005: 138).

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5 RETHINKING RESPONSIBILITIES: ON ONE AND ONE

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INTRODUCTION

As a practice and conceptualization, responsibility, if any, is currently under harsh debate. The actors (whether human beings or organisations) want to live in a trustworthy world. Unfortunately, there are forces which impede the positive intentions of human beings of doing good either individually or collectively. Many people feel that we live in a (too) turbulent and a vulnerable world imbued by conflicting ambitions. At least we are told so.

We live in a complex world – a wicked one.¹

Our own spheres (like focal nets) do not provide enough security and feelings of safety for the personal attempts. Dissatisfaction, mistrust, incredulity and even fear among people provide a good basis for doing business. Responsibility sells well. Due to this, Corporate Social Responsibility (CSR including also related Code of Conduct- policies) seeks a place in contemporary business strategies.

¹ For Finnish writer and poet Eeva-Liisa Manner (in her collection Inscribed Stone 1964) the world is a poem of the senses: an impression 'or a ring around the illusion of my senses' (as translated by Jeremiah 2009, 65). Besides, in the collection Flee, Boats, with Light Sail (1971) the observer is obliged to see the 'wretchedness of this world'. Would it be so that this wretchedness is a symptom of the awkward world and the complexity of the visible reality? Hence, the actor wants to distant herself from the reality as she 'moved into a tree which enchanted her, and continued her passage in the universe of the tree.... (translated by Jeremiah 2009, 87).

Human beings want, however, to be loved and cared. We all carry strong positive emotions. Welfare and well-being are of great importance for us. Satisfaction and the peace of the heart represent truly the tones of our inner emotions. Integrity is strongly valued. The social networks influence us whether positively, negatively, or as often true – carrying both of the aspects.

The major objective of this conceptual article is to expand the discussion on responsibility with some new proposals. The task is accomplished scientifically but also the power and language of art (and inherent artistic expressions either linguistically or visually) is employed too. The discussion of one (a distinct entity under consideration) and One (a reflection of the transcendental) provides a basis for this essay in order to look more closely some influential dimensions of human behavior.

The major theme of this work – the one and oneness - has quite a short scientific proximity with monism. Though interesting, in this theoretical study we bypass this with an encompassing statement: according to Stanford Encyclopedia of Philosophy *'there are many monisms. What they have in common is that they attribute oneness.*' (see, though, Chapter 3). Scholarly, the discussion on dialectics (whether representing dialectics of harmony or disharmony) provides a broad framework for the discussion. Hence, the two (and apparent bipolarities) must also be under consideration.

As noted, the substance of this essay is closely related to responsibility. A compassionate as a concept and practice will be promoted to discuss an alternative way of seeing the responsibility, particularly if the collective responsibility is under consideration. Would it be so that the essence of human behavior can be reduced to interactive situations - of loving and caretaking?

One cannot deny the fact that is this brief study some prior investigations conducted by the writer do influence some choices. The pre-understanding generated through some earlier writings (see e.g. Nikkanen 2013) have impact on the frames of the study; probably also clarifying the major issues and subtle tones of this essay.

THE TWO AND ONE

Often, at the embryonic stage in conducting scientific research, there may be a need for splitting up the phenomenon to certain parts (looking for the internal conformities; the breaking) and then for categorizing them (rediscovery of the fragments; searching for the internal coherence). This is necessary, as the point of departure is often the one – the phenomenon or an object that needs to be studied.

Indeed, the basic cognitive process (reflecting the use of a scientific and rational method) is that of categorization, which refers to conscious analytical stages (often sequential) of recognizing the essence of what is studied and its differentiation. This is done to increase the deep(er) understanding of the object that is in focus; actually its coherence in relation to other phenomenon. The simplest form of this method is the use of two distinct categories. This means that the study object (and its character, and quality) is conceptually divided into two parts. Using dichotomies is actually a procedure of creating a sharp distinction, in which the whole (the oneness) is divided into two distinctive parts. The divided parts are first (analytically) separated and then isolated and there should not been any overlapping with the segregated qualities of an

object. Hence, the qualities are mutually exclusive. Subsequently, the two distinctive categories create their own entities and qualities expressing the prevalence of dichotomy.

In linguistics and semiotics, the dichotomy is associated with binary opposites. Indeed, a binary system is a dyadic constellation, a pair of related concepts, that are opposite in meaning. Finally, in this way of thinking, there is either a contradiction (or complementarities) at least related to basic terms that are used.²

The binary opposites can be used in categorizing the objects though a clear dualism generates, more or less, a simplified worldview of the issues under consideration.

In addition, the idea of binary opposites can be a carrier of even a larger system. In so called Saussurean theory (according to de Saussure; a representative of structuralism in linguistics) a binary opposition is seen as a fundamental organizer, not just of simple analytical attempts, but also of human philosophy, language, and even culture. Long before de Saussure, already Plato clarified the Ideas by paying attention to dichotomies.

When summarising Plato's theory of ideas, Russell (1945, 142) exposes the difference between the knowledge and opinion. In Plato's thinking knowledge is infallible whereas opinion can be of what both is and is not. Opinions include opposite characters which implies that what is beautiful is also – as least in some respects – ugly too. Sensible objects have this contradictory character. Hence, opinions are presented us with senses, whereas knowledge is of a '*super-sensible eternal world*' as Russell summarises. Opinions are related to beautiful things, but knowledge is concerned with beauty itself.

The dialectics or dialectical examination often provides a basis for understanding deeply the bipolarities of the phenomenon. This means that simultaneously a Thing is both prevalent and not (this approach is discussed more deeply e.g. in Nikkanen 2013, 27-31). Actually the dialectics *per se* can refer to two distinct approaches: the dialectics of disharmony and disharmony.

Dialectical approach (categorized rather as dialectics of disharmony) is well-grounded in the Western philosophy (exemplified e.g. by the Hegelian dialectics) though it is typical for inherent theories to stress antagonism, non-cooperativeness, and even enmity. The opposite sides of the phenomenon that are studied are separated and must be discussed on a disaggregate level.

Nevertheless, the opposites are needed to understand more properly the 'things' such like conflicting elements of the responsibility. One can even claim that all the things come into existence by way of polarities. The dialectics of harmony is widely applied in non-Western philosophical traditions (see e.g. Change 2006 for more discussion). Accordingly, the parts – even the opposites - are meaningful only in their relations to the whole.

The following Figure 1 depicts the differences between these two diverse orientations (adapted from Nikkanen 2013, 38).

² In collection Flee, Boats, with Light Sails (1971) Eeva-Liisa Manner considers contradictions poetically by saying 'Do not think that I consider important this or any other attempt to conquer contradiction, The whole sense of the poem lies in futility: birds like openings in the black snow at the heart of the long, cold day.' (as translated by Jeremiah 2009, 90)

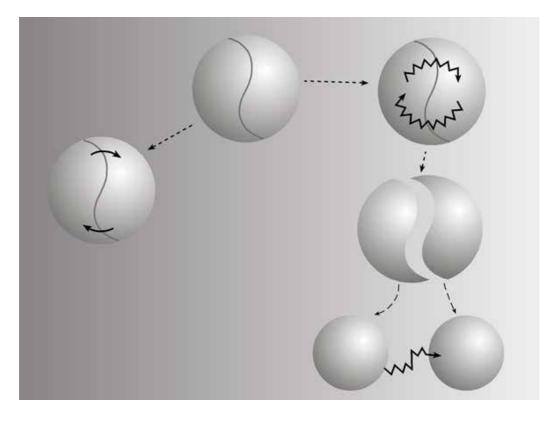


Figure 1. Contrasting Dialectics of Harmonisation ('oneness') and Dialectics of Disharmonisation ('twoness')

Like in science, also considering artistic expressions the sharp dualities are often in focus. Actually, they often even provide a basis for the works of art. In her poem Contradiction, Eeva-Liisa Manner (one of the most notable Finnish contemporary poets) used the following tones in order to manifest the presence of opposites (Manner 1977, 10 as quoted in Elovaara 2000, 269; translated by Markku Nikkanen/MN):

"And the light shined in the darkness and the lightness did not overcome it Everything has gone wrong in the hearts so self-satisfied, so strong, capable and broad like a Roman basin"³

The contradictionary element exposed by the writing must be understood in relation to the Gospel of John (1:5), in which the writer claims in a well-known matter:

' The light shines in the darkness, and the darkness has not overcome it'

³ The analysis conducted by Elovaara is somehow incomplete as she disregards the last part of the poem. In her poem Manner continues as follows *...vain sadeihmiset käsittivät, lempeät, nöyrät....*' *(...just the rainpeople understood, the lenient, the meek...)*. In the context of the poem the translation of Finnish word 'lempeä' as compassionate would also be appropriate; see more discussion in Chapter 4.

With the help of deconstruction, we understand how Eeva-Liisa Manner turns the abovementioned statement to a different angle by saying that the lightness (in contrast to darkness) did not understand it. She rotates the linguistic depiction and gives a new, totally different perspective for the reading experience (Elovaara 2000, 270; see also Nikkanen 2013, 30). This gives a new impression to conventions, what we all carry and which often restrict our affective experiences. Indeed, in the exercise of deconstruction the contradictionary elements are not excluded, but rather they generate each other. Elovaara (2000, 270; see also Kaunonen 1995, 47-48) detects this in a poem by Manner called Untitled Cycle (in collection Kuolleet Vedet 1977; The Dead Waters; translated by Jeremiah 2009, 102):

*'We grasp light, only because we live in darkness'*⁴

Undoubtedly, the poem exemplifies the power of the artistic expressions in dealing with contradictions, which are somehow prevalent in every phenomenon. We see something though it is *not* explicitly present now in the world we live in; it is beyond our sensory capabilities. The power of opposites is engaged in the fact that the juxtapositions are needed to understand the Things we are interested in. This is, however, not the case of using strong exclusive oxymorons but rather of stabilizing dimensions. The stability stems from contradictional movement of the elements. It is actually the true movement which puts the elements together (Kaunonen 2005, 48).

The works by Eeva-Liisa Manner can give a profound basis for discussing the contradictionary elements of the world - as Jeremiah (2009) points out her poems are full of tensions: '*light/dark, idea, matter, apartness, belonging. Boundaries are blurring; self and world collide and merge.*' In all, there exist both the harmonious and disharmonious forces (compare to Fig. 1). Moreover, in her portrayal of the works by Eeva-Liisa Manner, Lavinia Greenlaw says that 'the poetry of Eeva-Liisa Manner is remarkable in its precision and force. It seems to occur at a sub-atomic level, where experience is borderless and change continuous while surfaces remain clear and still.' In the poetry by Manner, any boundary seems to be arbitrary.

THE ONE

"The One is somewhat shadowy"

The above statement was argued by Russell (1945), when he explicated the major philosophical foundations of Plotinus. Despite of his sometimes vague, even residual position in the history of Western philosophical thought, Plotinus can be regarded as one on the most influential thinkers in the field of the beauty (see eg Monk Serafim 2010). Unlike some scholars still claim, he is not merely a Neoplatonist thinker, but his proposals represent a distinctive approach to the questions of beauty (Serafim 2010, 52). Neoplatonism can be regarded as a metaphysical and

⁴ additionally, the poem have the following rhyme: *... ja absoluuttinen valo, on musta aukko, josta putoat peilin tuolle puolle'* (*^c ... and absolute light, is a black hole, through which you fall to the other side of the mirrow*; as translated by Jeremiah 2009).

epistemological philosophy - a form of idealistic monism strongly imbued by mysticism.

According to Monk Serafim, for Plotinus the One is God, a transcendental reality beyond our existence. Hence, it cannot be truly conceptualized. For Plotinus the ultimate reality was a primal unity – the One. Subsequently, all the things owe their existence to this potent reality (Armstrong 1995, 121).

The theoretical system of Plotinus can be divided into two parts: there is an invisible world and the phenomenal world. The world we cannot see contains the transcendent One. The One is infinite as opposed to the many and the finite. With the help of the cognition, a human being can approach higher spiritual levels. At the top of these experiences there is integration to the One. This experience can be described as a kind of a mystical ecstasy, the state in which all the conceptual differences are left behind (Vuorinen 1996, 84, Armstrong 1995, 121).

Monk Serafim claims that the Neoplatonist way of thinking emphasises how the objective and source are in a strong relationship. The One is not just a source or reason of everything, but also an objective. These two processes are not consecutive (hence questioning the well-established and conventional effect-cause- scheme), but mostly concurrent. This reversion, as Monk Serafim explains, can thus be defined as 'participative-causality'. The result as an outcome - the One - participates itself to the cause. Hence, it is rather a question of interaction between a cause and a consequence than a formation of simple one-directional transaction.

Using again the means of the artistic expressions, in the poem by Eeva-Liisa Manner (1960, 47) the attempts to see the One is rhymed as follows (translated freely by MN):

"An let us find the One behind so many, the essence which we do not know, the beauty which we do not comprehend, which influences us forever and stays itself immutable, which is the heart of the Beings, self being nonexistent; which is the spirit of a wolf and a bird, the self without it"

According to Elovaara (2000), the One as depicted by Manner is in close conjunction with the ideal as revealed by Plotinus when he talks about the One. Manner is, however, a poet and if linguistically analysed, her work corresponds even with a prayer. Hence, it does not contain a scientific explanation for seeing the transcendental reality – or does it?

FROM NEUTRAL RESPONSIBILITY TO PERSONAL COMPASSION

Responsibility can be seen an assumption of accountability by the actors (and the others as well) that they are doing something beneficial for the others and behave in a certain trustworthy way. Firms as actors tend to underline their attempts to be engaged in Corporate (Social) Responsibility- related policies although nearly always the motivation of doing so is quite selfish.

The increased need for continuously higher profits (an assumption of the profit-maximization company) is dominating the activities; as Scott *claims '…an executive's commitment to CSR is circumscribed by profitability' -* always and unconditionally. Hence, CSR is often an ordinary factor of production and not an active measure for making good. Increased reputation provides the firm with increased visibility which later increases the firm's social license to operate in society (Bhattacharyya, 2010). Accordingly, the CSR as a practice actually breaks the harmonious balance as the profit-making dominates the related policies and intentional measures of human beings.

Despite the popularity of CSR in modern business rhetoric, it is worth questioning, if the practice ever truly started. Fleming and Jones (2013) claim very clearly that it never really began (see also Nikkanen 2012, 59). The writers believe that there are various (unsolved) contradictions of globalization to name convergence and divergence, inclusion and exclusion, and centralization and decentralization (see Fleming and Jones 2013, 5-64).

They feel that current research on CSR needs to change its course of action – both in theory and practice. They also postulate that with some respect CSR is better understood as *'an ideological practice that's sustains corporate hegemony, rather than attenuate or shift its axiomatic principles'* (the ills of global capitalism). The wickedness of CSR arises from its absurdity: the trade-offs between financial (related solely on maximizing the profits) and non-financial targets cannot solved appropriately. This eventually leads to disequilibrium between diverse objectives.

It can be argued that CSR is truly an emblem of dialectics of disharmony revealing the apparent collisions and conflicts as there is a strong dominance of one thing (the assumption of profit-maximising firm) over the other objectives. To avoid the destructive confrontation, the opposites must be treated separately on disaggregate level (see Nikkanen 2013 for more discussion).

Due to remarkable limitations in dealing appropriately with organisational responsibilities, new proposals are required. This is necessary as often the interorganisational issues (such as collective corporate or organisational responsibilities) are as much inter*personal*, as they are inter*organisational*. Accordingly, the human beings act in a more responsible way, predominantly not the firms.

The attitude of compassion can be based on the following well-known statement (the Golden Rule as prevalent in most religions):

"Don't do others what you don't want done to yourself"

Besides, in the Gospel of Matthew (Matt. 7:12) it is argued that *'Therefore all things whatsoever ye would that men should do to you, do ye even so to them'*. Briefly, this attitude can be summarised as follows:

"not only do to others as you would have them to do to you, but also do to others as you would wish to be done to you, if you were in their place" especially if one meets people who suffer and therefore need help.

In contrast to organizational responsibilities including their elusive character, compassion is a true expression of making good as it refers to intentions to embrace a human being – a neighbour – with sympathy and to do something beneficial in order to relief him/her (even a creature) from the pain.

According to dictionary, compassion can be defined as a sympathetic consciousness of others' distress together with a desire to alleviate it. Hence, there are actually two subsequent reactions: one emotional awakening and the second of doing something beneficial. The important notion is that we'll do something which is good for another person and primarily not for us.

We are ready to sacrifice something to help the others, which are serious and/or desperate situation. In short, they need help and we are not just able to respond to their situation it but have readiness to help them.

Compassion is both understanding and empathy for the suffering of others. It is strongly an emotion though often it can also be affected by some other cognitive determinants such as justice, fairness, or responsibility. Etymologically, the Latin word of co-suffering gives an impression of its content. We are together, we somehow form a one. There is no boundary between I and you. Hence, compassionate is not just a religious virtue (appeared in all the religions; actually, one of the most notable ones), but a practice well-established in human interaction.

CHARACTERISING THE REACTIONS IN CREATING INTERPERSONAL INTIMACY

"Between stimulus and response there is a space. In that space is our power to choose our response. In our response lies our growth and our freedom." (a statement by Victor Frankl as quoted in Becker-Phelps 2013)

In order to develop skills in the art of making particular interpersonal relationships to increase one's personal capabilities in being more compassionate, Becker-Phelps provides a list of diverse stages as follows (shortened and slightly modified by MN).

In the beginning consider the person you would like to be.

Think about the person you would like to be, especially in the areas in which you struggle. Also, take the time needed to develop a clear vision of the more ideal version of yourself.

Think deeply about the meaning or origin of your reactions.

Undoubtedly, there is a reason that you react as you do. It can be very helpful to understand your reactions, and perhaps even their origins.

Observe the outcome of your reactions.

Pay close attention to the results of your reactions. By bringing negative consequences to your awareness, you will be more motivated to change your reaction to a desired response.

Imagine a better response.

Think about better ways to respond; imagine doing them and the consequences of this. Also,

imagine what it would feel like to respond more in keeping with what you want for yourself.

Learn a more compassionate approach not only to the other person but also on yourself.

This is necessary as a personal change takes effort and time to accomplish. Hence it is important to support this process within yourself. But remember: being (over) critical will only undermine your efforts.

In all, it is of great importance to learn a more compassionate approach to yourself: support and encourage the mental process within yourself - the contemplative method of approaching yourself and dealing with your inner emotions. This internal emotion (readiness to act) provides a basis for subsequent conative measures.

The question is how to cope with the One (whether this One is God or an Absolute) or with the Truth, or the Wisdom (axiologically, with the themes of the good and beauty). Indeed, together beauty (the aesthetical dimension) and good (the ethical one) create more space to be and behave in a more responsible way.

The notion of axiology (consolidating the good and the beauty) is close to the Aristotelian approach when he claims that beauty it is in the good it will bring and of how much it can spread that good to other people. In other words, to be more ethical means to be more aesthetical as well. Also, Plato combined ethical (goodness) and aesthetical (beauty) by using a concept of καλός (good). This concept, which has several variations in terms of interpretation, can be a carrier of many things, which have a positive connotation. Hence, the way this concept is interpreted reflects also the philosophical choice of an observer. For some scholars kalos can be a synonym of good, for others it refers to issues of beauty (Monk Serafim 2010, 16). Beauty has a dominant role in the thinking of Plato it is actually 'a paradigmatic representative of the world of the Ideas' (Serafim 2010, 22 as translated by MN). In all, aesthetics represented by the individuals' perceptions is in close conjunction with ethical decisions (for example those employed by organizations' in their efforts to be more ethical and responsible; see e.g. Nikkanen 2012 for more discussion). One part of the aesthetics is the examination of values. The discipline is sometimes even classified as a branch of value theory (The Dictionary of Art 1996, 172) - along with ethics. In the field of axiology, the value theories combine both of the disciplines by complementing the adjacent scrutiny. Hence, when we approach the good (with our acts), we also approach the beauty, like pieces of art such like icons.

ICONS AS VISUAL REPRESENTATIONS AND TRIGGERS FOR A MORE COMPASSIONATE MIND

An icon can be perceived as an 'image'. Originally, a Greek word ('eikon') can be interpreted as a 'portrait', but also as a 'representation' (Yazykova and Hegumen Luka 2002, 11). In sacral use, in front of an icon the one is approaching the God. Indeed, an icon is a gate to divine as it communicates with the observer (a prayer). Often, the icon causes internal affections in the mind of the one by means of artistic-symbolic language. There is a window into an invisible world (of the One of the faith), which is non-attainable by means of cognitive-rational methods and attempts. The following description provides a basis for the role of the icons (as explicated in Nelson and Collins 2007)

'When you look at the icon, the icon looks back. The frontal face, large eyes, symmetrical design, and brilliant gold ground command your attention. Icons also talk back. Gestures, glances, and especially inscription allow the Holy person to address the faithful, who pray to and through the icon. Icons are doors, gates, and windows, but not in the Renaissance sense of a painting as a window into another world. The saint depicted is on, or in front of, the picture plane. Icons are thus places where the Divine enters the space of the beholder.'

Unlike in the poems by Eeva-Liisa Manner, in the icons just the Light is presented, not the darkness. Hence, in icon painting (probably) the traditional and contrasting light creating methods are partly ignored.

Our Lady- types of icons are some of the most famous ones in the historical iconography. Of the multiple different forms of these icons, the following icon is a representative of so called Our Lady of Tenderness- icons.



Figure 2. Our Lady of Tenderness

In this icon, Our Lady is close to his Son as He gently touches Her cheek. Very lovingly, the Virgin presses the child to her bosom. The Mother and Child are intimately one. Even without any theological knowledge and inherent verbal linguistic equipment, one can see and feel how Her

face speaks the compassion of the heart. There is a special closeness and tight intimacy between the two; a strong feeling of empathy.

Besides, an observer can see some glimpses of the mortal future as She seems to have already a delicate feeling, a pre-existence of sadness, because of the anticipated sorrow; kind of commiseration due to forthcoming tragedy. In this icon, the Divine truly enters the world of the beholder: an imperative for us to embrace the affections of compassion.

THE INNER PEACE, SUBSEQUENTLY

As already noted actually with compassion, it is not a question of action and reaction (between two or more persons), but rather that of interaction. The emotions, like those in front of an icon, do influence our reactions. As with the tenderness icon, the two are mutually tied up with a particular relationship in which they share. Indeed, sympathy means that the pair shares the feelings of one another. The two somehow form the one. This, however, requires something which can be defined as inner peace – or peace of heart. It can be even a prerequisite to embrace truly the other people. Hence, both cognitive and emotional skills are required.

To preserve inner peace, certain steps are required (according to Scupoli 1589)

Keep your outer senses in order and flee all licentious in your external conduct.

In one is accustomed to behave with decorous quietness, the inner man takes the positive tones of the outer.

Be disposed to love.

All men and live in accord with everyone, especially with those who need our compassionate mind and

Keep your conscience unstained,

This is a feeling of peace in relation to yourself, to your neighbours, and to all external things (and theologically, as he claims, in relation to the One which corresponds with the God).

Accustom yourself to bear all unpleasantness and insults without perturbation.

Undoubtedly, one needs to suffer oneself before he/she is ready to accept this.

After the moments of internal contemplation, we are ready to face the inner of us but also the neighbours including also the Mother Earth as there should not be any demarcations or segregating contradictions between diverse entities. Instead, there is a union. Unlike in science, in real world the boundary is impermeable. Using again the poetical expressions of Eeva-Liisa Manner (O Darkness): "Pray for the animals, you who pray, who beg for Grace, Success and Peace, into them, too, has flowed the immanent Spirit, they too are souls, more whole than you, and clear, brave, beautiful; and if we begin from the beginning, who knows, we shall be able to share these sufferings, too, simpler, harsher, more infinite than ours."⁵

Finally, we probably do not even require any words or expressions to obtain the appetitive soul as argued by Plato with feelings and moderation - as Eeva-Liisa Manner again manifests 'Words come and go. I need ever fewer words. Tomorrow, perhaps, I'll need none' (poem Experiences of Empirical I from collection So the Seasons Shifted 1964 as translated by Jeremiah 2009, 58).

CLOSING REMARKS

When dealing with compassion we understand that we live and go together. We as human beings are tied up with a particular relationship through our emotions and feelings. We expose ourselves to close intimacy. Subsequently, this one (e.g. a human dyad) is approaching the One. The One has several connotations depending on the approach: the theologists perceive this primary concept in the different way than the philosophers (and the Western science).

Unlike with compassionate, the classical and dominant paradigm of the free market systems sees actors as looking only for their own interests very selfishly. This type of collective behavior cannot solve social problems caused by the actors. This also implies a sharp contradiction between the measures for 'we' and 'they'. As the 'they' are not us, we have rights and an open legitimation to treat them with the way we like. The logic of feeling compassionate strongly challenges the measures and affections of disregard. The 'others' are 'we' as we are the one. There is no distance – or as Eeva-Liisa Manner says in the title of her poem *'The distance between one and no one is boundless'* (as translated by Emily Jeremiah 2009, 70).

One cannot be compassionate without conscious movements of a heart. Indeed, when contemplating the One (and subsequently the others forming the one), one can aim at reaching an equilibrium between the self and the others. In similar way to approaching the more compassionate with certain steps, one can approach the inner peace, the peace of heart as often noted in theology. It requires certain moments.

The texts by St. Nicodemos of the Holy Mountain can provide a basis for the contemplative efforts of the man. He argues that we should keep conscience unstained relation to God, and to ourselves, but also to our neighbors, and to all external things. If one's conscience is kept clean, it will produce, deepen and strengthen the inner peace. Despite this most theological manifestation, the

⁵ When reading this poem, Iannella-Helenius (1995, 154-155) argues that the poet feels that the original sorrow can be found from the hearts of the creatures and in their deepest space (*...olioiden sydämen sisimmästä tilasta...*..)

statement can be employed also in more general situations e.g. in the attempts of human beings to search for internal and external peace.

In order to be more compassionate, and hence more responsible, there is a prerequisite: an attempt to maintain and preserve the inner peace. Without the peace of hart, one cannot approach appropriately the One either. Hence the one (an observer!) is obliged to cope (often scientifically) with the one, and the polarities. Nevertheless, one (a human being) should not forget the imperative which all of us carry: we should be disposed to love all men and to live in accord with everyone – but also with the One.

This short essay provided also some insight into understanding the close relationship between science and art. We saw that artistic expressions can truly contribute to the discussion of human behavior either verbally (as with the collection of poems by Eeva-Liisa Manner 1960, 1977, 1980 and 2009) or visually (as with the icons). Eeva-Liisa Manner felt strongly that the dominance of logical reason (and pure science) dominates the current worldviews and this attitude cannot solve the essential questions of human behavior and existence (see e.g. Iannella-Helenius 1995, 148). Would it be so that this observation is valid also when discussing the collective responsibilities such like CSR- related policies? With no doubt, the combination of scientific and artistic worldviews requires more attention in further studies

Finally, the following poem is a fascinating (and lovely impressionistic) description of love between the two. Subsequently, it expresses strongly the prevalence of the twos in a unified one (a poem by Kathleen Raine as quoted in Ware 2005, 239, also 43).

"So they loved, as love in twain, Had the essence but in one, Two distincts, division none, Number there in love was slain"

The One is probably transcendental, beyond our capabilities to totally comprehend it is magnitude and all-encompassing nature, but the one is truly immanent. It is we – the two or more – together. Subsequently, with compassion, the two is unified to one. And then there is just the one and One.

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6 SUMMARY

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The significance of seeking a scientific basis for wicked problems does not lie only in the theories - rather, it lies in a concern to integrate and manage useful knowledge to redevelop theories, but in ways that are suited to wicked problems thinking as well as practice. This development path requires multilevel skills and a willingness to change both company and personal attitudes towards traditional ways of doing business. The business world tends to understate, for example, climate change, since it would be too complex and costly to take all requirements into account. Furthermore, numerous stakeholders make it extremely difficult to implement worldwide change, where companies would produce goods that would follow the path of sustainable development. One may wonder how the articles presented above relate to each other or what the thin red line is in this journal. The spirit of wicked problems is complex: not only the nature of the wicked problem but also the context that will define its nature. Furthermore, the solution is related to the context and time. Therefore, different views are needed to even slightly understand the wickedness of the environment under consideration. The person itself is an object of the phenomenon. Sometimes wickedness is related to social networks in the company, and as time passes, such a problem becomes irrelevant, but others will arise. This journey to the hidden world - the spirit of the wicked problem - will end at this time. On the other hand, as a reader, you have your own path to seek new unexplored wicked problems, and we hope that these articles have expanded your way of thinking; not only to find out the wicked problem but also how to approach such problems. Solutions to wicked problems may not always be available, but the best way to handle such problems really exists, in other words finding solutions for coping with wicked problems. As a conclusion, leadership and strategic management, diversity and intercultural issues are the most known examples of wicked problems in theory as well as a practical perspective.

Leadership and management in general is one crucial key to approaching wicked problems. At the seminar, Dr Peter Zashev (Hanken SSE Executive Education) referred to the challenge of leadership and described a perfect leader with good communication skills and an extensive [social]

network, able to give feedback and provide coaching support to employees, innovative and curious about taking risks, making decisions and having future [strategic] plans. An excellent leader also knows how to balance results, success, ambition, people, goals and moral and ethical issues. Such a leader also knows how to form and inspire winners, not only on a personal level, but also in terms of motivating the team to achieve the highest performance to meet the [highest strategic] goals. Curiosity and mindfulness are also crucial when dealing with wicked problems. He also argues that the complexity is the leader's enemy, and by simplifying matters, it is much easier stay on track. It is easy to agree with these viewpoints. As mentioned above, wicked problems are complex and cannot be solved without open communication and interdisciplinary teamwork with shared goals and values. Indeed, such characteristics are related to social networks and, therefore, such attributes are the most important mile-stones for truly turning wicked problems into victories.

Cultural differences have their own role in this change, and in some countries the values of environmental issues have not been seen as being as important as economic growth. In addition, the business world can make changes in the name of sustainable development, but this development process takes a long time and many resources. Ultimately, who is willing to pay the bill – us as the customers, companies, stakeholders, governments, the environment itself? Without interdisciplinary teamwork, mutual and shared understanding, open communication and collaborative social interaction, there is only a small hope of extending knowledge of wicked problems beyond basic research in order to serve the purpose of enriching business life. Compromises are necessary to reach an appropriate solution, which may not be right or wrong, but suitable to the situation with the [limited] knowledge we have gained through the decisionmaking process, and thus the interdisciplinarity makes the wicked problem even more wicked, if that is possible.

Companies in the globalised world have to be aware and alert, and this concerns all stakeholders. Globalisation is dynamic and unpredictable – uncertain in many ways and on many levels. As Professor Gale said in his keynote speech at the Wicked World Seminar 2013, "A wicked problem is dynamic and uncertain. It is a live show which constantly changes. A tool is not a solution, but you have to choose an appropriate tool. The wicked problem is dynamic and alive, you cannot control it". In this world we should cope with and try to find the best tools and methods to tackle such wicked problems. However, such tools may change as time passes, and indeed they have to, but what about our understanding and thinking - do they change as well and is this change fast enough? Master's students live in a similar situation to working as a change agent in their company, and at the same time they try to develop issues with limited knowledge and tools. Thus, they really need more consultation on a wicked problem approach in their own work as well as their studies. But how do they do this in a very short time if curriculums are planned for several years ahead, bearing in mind that there should also be a vision for future wicked problems? Indeed, it is the question of context – it is crucial to set the problem in the right context, and this lead us to other questions about having the 'right' context: in other words, what is the right context today may change tomorrow. Yes, we are surfing on the waves again and waiting for the next super wavers or tsunami to hit our systems again. Sometimes this is the only way in which we can really prevent such issues or at least understand which proactive actions can be taken. And yes, we can also learn from mistakes and therefore have lessons to learn -all of us. We hope that you are now inspired about wicked problems and have a hunger to learn more about them. In that case, we have good news - the pedagogical model of wicked problems in higher education will be published in 2014.

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