Wicked Problems Plaza – Facilitator's Manual

Theoretical background and practical elaborations

– fifth draft, 22 May 2015

Introduction

The Wicked Problems Plaza manual is designed as a first guide for facilitators at the Wicked Problems Plaza (WPP) at the New World Campus (NWC). It consists of three parts: the theoretical background, the facilitation manual and the practical information. It explains the concepts and approaches and provides you ideas about the possibilities that are available in organising a systematic exploration of a specific "Wicked Problem" as well as how to use the spaces of the WPP. Each WPP session will be unique. It should always be structured specifically to address the wicked problem at hand and to achieve the goals and expectations of the stakeholders that will be involved at that very moment. Each wicked problem session, therefore, also requires some degree of preparation on the content of the problem – in particular on the many dimensions of the problem and the necessary stakeholders that should be involved.

This manual provides general guidance on building blocks of decision-making processes around wicked problems. It should help the organisation of well constructed sessions, but also allow for a considerable measure of flexibility and freedom to enable 'out of the box' ideas and new directions for solutions to emerge from the group. In addition, this manual provides a first 'checklist' to support you in your facilitator role.

The theoretical background part of the WPP manual has the following parts:

0. Introduction
1. Wicked Problems Plaza – the theory
   - the WPP concept
   - the design: a multifunctional pressure cooker
   - the six pillars
   - the importance of colours
   - Triangulation: defining the relevant stakeholders
   - the nature of interaction: from position based to vision based
   - willingness to contribute
   - The physical experience of thinking hats
   - Timing
2. Sequences of a session: five routes

Whilst you read, review and put this manual into practice, please reflect honestly about whether you as a facilitator feel confident about: the theory behind the WPP; the proposed methods and the proposed use of tools. Do you feel comfortable with this approach and in your ability to work with a level of unexpected and perhaps sometimes challenging behaviours and outcomes? Not all scenario's and options are elaborated in this manual, so feel free to provide feedback and signal missing elements of the approach. This manual represents 'work in progress'. For questions and feedback on the manual, please contact Rianne van Asperen: asperen@rsm.nl

The Wicked Problems Plaza Concept

There are simple and complex problems. Simple problems are easy to solve; complex problems resist solving and require sophisticated ways of thinking. But there are also 'wicked problems'. Wicked problems even resist defining. They not only require other ways of thinking, but also involve other parties to work on solutions[1]. Most of the remaining problems of sustainable development – hunger, poverty, health, ecological degradation, education - are arguably 'wicked'. Otherwise they would have been solved already by either firms, governments or civil society organizations on their own. A wicked problem is difficult to solve for four reasons: incomplete or contradictory knowledge, the number of opinions involved and possible solutions is large, the economic burden is considerable, they are interconnected with other problems and multiple stakeholders are involved. Wicked problems involve systemic change and can only be resolved in collaboration with a large number of stakeholders form different spheres of society (state, market, civil society). Luckily, addressing wicked problems also create immense opportunities for novel and creative solutions.

Simple	*Complex*	*Wicked*
EASY TO SOLVE	**RESISTS SOLVING**	**RESISTS DEFINING**
Single loop learning needed	**Douple loop learning needed**	**Triple loop learning needed**
When the answer/solution is known: Clear problem with a clear solution	When a problem is (relatively) well defined: the problem and solution are not clear but can be understood with time	When breakthrough thinking is needed: problem and solution are not understood and keep shifting when we try to define them
Technical problem	Organizational problem	Societal problem
Predictable Straightforward Obvious	Many elements, although the elements themselves are familiar Hidden root causes Non-linear Inter-operating parts effect each other	Ambiguous Chaotic Many shareholders with conflicting perspectives Many elements, many hidden and some hitherto unknown Strong social aspect Involves changes in belief, behaviour and/or identity No right/wrong solutionn Non-quantifiable No precedent

Source: mofox.com; van Tulder, 2012 (Skill Sheets)

In practice wicked problems have not been adequately addressed for a variety of reasons:

✓ not all involved **stakeholders** have been engaged;

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[1] The term 'wicked problems' is a known scientific concept. It was first introduced in urban planning and design literature by Rittel and Webber, 1973

✓ the **real problem** is not addressed (too simple or naïve solutions are sought);
✓ there is no realistic **'business case'** for the solution, which limits its (financial) sustainability;
✓ **expectations** are too optimistic or too naïve;
✓ solutions are sought as a **compromise**; there is limited 'out of the box' thinking;
✓ there is a limited willingness to discuss **different scenarios** and different solutions….
✓ … which is in the end related to the **absence** of a **'safe arena'** in which to share dilemmas and expectations, and work on **collaborative and real solutions**.

The New World Campus (NWC) is built around such a safe arena in which on a regular basis and in a structured and supportive environment, parties can physically get together in creative sessions to understand problems, share dilemmas and work on collaborative, creative and realistic solutions.

The Wicked Problems Plaza at the New World Campus:

.... is a multifunctional space (**the Plaza**)

    … in which behaviorist stimuli are created to address really wicked problems (**safe space**)

      …. In a constructive sequence (**smart order**)

        … in which critical elements are brought in at the right time (**collective intelligence**)

          … aimed at real and sustainable solutions (**pragmatic and idealistic** at the same time)

The Wicked Problems Plaza is organized around a number of spaces in which the participants can literally go through four phases and/or dimensions that are distinct to addressing each problem. This specific sequence has proven to be particularly instrumental for finding 'out of the box' solutions that are nevertheless realistic[2]. The four spaces are: (1) the interest space, (2) the equity space, (3) the efficiency space, (4) the partnering space. The Plaza offers modern as well as traditional tools and infrastructural conditions to enable participants to go through these spaces in a structured, safe, inspiring but also fun manner. The Plaza thereby functions as the vibrant meeting place for the New World Campus community. Regular open sessions are organized at the NWC around wicked problems. Six pillars of ideas and messages will show the common projects the NWC is active in and for which external parties are invited to participate and contribute: (A) wicked problems, (B) good intentions, (C) business cases, (D) collaborative solutions, (E) splendid failures, and (F) idiotic ideas. The side of the corridor of the NWC is intended to display these dimensions on a semi-permanent basis. The Plaza can also be used for specific external groups that want to use the Plaza and its staff for problem solving sessions.

The WPP is an idea and methodology developed by Professor Rob van Tulder of the Partnerships Resource Centre (PrC) at the Rotterdam School of Management. It is further developed in collaboration with the staff of the PrC in collaboration with the NWC. The WPP at the NWC brings stakeholders together with diverse – and often divergent – perspectives and interests. It is intended to remove blockades that inhibit innovative solutions that require novel ways of thinking and effective ways of collaboration. During a WPP session the different dimensions of a problem are

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[2] For a more detailed overview of the theory behind these four 'spaces', see Rob van Tulder (2011) Issues. Chapter one: on decision-making under uncertainty (manuscript)

systematically identified while dilemmas and trade-offs that emerge are discussed. Subsequently, participants are invited to brainstorm on possible solutions which always include sustainable business models. This is the reason why one of the constituting pillars of the WPP is the 'business case'. This does not imply that corporations can solve all societal problems, on the contrary, but that thinking in terms of business models and business cases helps in distinguishing more from less productive solutions. The WPP aims at providing 'entrepreneurial' solutions to societal problems that require a good interaction of all societal spheres and lead to sustainable and inclusive approaches. It involves (pro-)active attitudes, innovative solutions, that are also efficient and economically, socially and ecological sustainable and viable. Entrepreneurship can thereby reside in all spheres of society. For the remaining (wicked) problems of this world, no actor - firm, government or civil society organisations – have been able to deliver solutions on their own. The WPP provides a physical environment in which participants in one day (or one hour or perhaps more days) will be taken on a journey from (abstract) problem to concrete solution by using their head, their heart and their hands. The only way to approach a wicked problem is from a range of angles, interests with the intention to arrive at 'out-of-the-box' solutions. This manual will further elaborate on some of the reasoning behind that idea.

Design: a multifunctional pressure cooker

The New World Campus in The Hague pioneers the WPP as an innovative workplace. We have built a cylinder made in the form of a pressure cooker, specifically designed for the WPP (Figure). In this pressure cooker there are four spaces through which the participants move during the day that are related to the four spaces head, heart, hands and, finally, collaboration. Each space provides a triggering environment where those present can begin to think and act differently regarding their wicked problem. Participants can find inspiration and encouragement from outcomes of earlier WPPs on the four pillars in the cylinder, the 'inspirational pillars'. As the facilitator, you will lead the group through each phase by offering different questions, tasks and triggers for new thinking and experience.
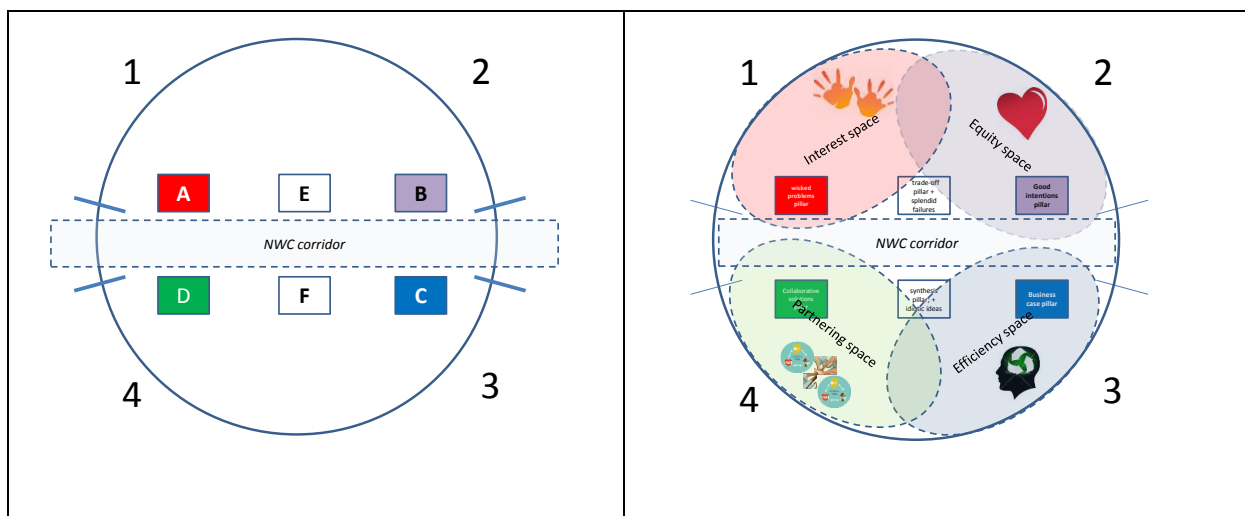
The four spaces of the WPP define four different dimensions of a problem that can generally be distinguished when decomposing a problem in either cause and consequences, problem-solution sequences or equity versus efficiency dimensions. Each of these spaces has a separate function in

addressing the issue. They are related, but should also be treated separately in order to explore the most important dimensions of a wicked problem.

1. **The interest space (hands)**: should make it possible to 'get your hands on the problem'. During this phase, participants list the most important dimensions of the wicked problem and the stakeholders involved.[3] Depending on the time and organisation, the interest space can be dedicated to exploring all dimensions of the issue at stake.

2. **The equity space (heart)**: helps you to explore your own intentions and passions on the issue, without direct relation to the practicalities involved in the issue. What do you consider 'fair' for instance; what does your heart tell you? What dilemmas do you face when dealing with the problem? What trade-off do you have to make before you are able to really address the problem?

3. **The efficiency space (head):** can help you further identify what is feasible (and also explain partly why some of the good intentions have failed). What rational solutions and approaches can you imagine? Why did solutions not work yet? The efficiency space is about creative brainstorming and adding the dimension of feasibility. The 'business case' pillar should stimulate you to think in terms of economically sustainable solutions to a problem (or the lack of it). The business case reveals the 'logic' in the longer run for addressing the issue by a particular stakeholder.

4. **The partnering space (multiple hands-hearts-heads):** facilitates a structured discussion on collaborative approaches and vision-based negotiations. In order to reach these, out-of-the-box thinking is necessary. For the latter, the 'idiotic ideas' pillar is available to brainstorm in a more or less structured manner. Once brainstorming is undertaken, the (remaining) stakeholders can work together on ways of implementing solutions or on frames to further discuss the issue in future sessions and initiatives. The partnering space is intended to bring the strengths of each participants together in creative and innovative directions, rather than searching for compromises which has been the normal way of negotiation (see below). Partnering therefore also implies that stakeholders remain independent of each other, but share complementary competencies and keep on investing in themselves.

The four spaces also define four typical "thinking hats" to a problem in which groups can be stimulated to explore all corners of a particular space. The four spaces can overlap, but can also get confronted with each other. Each space has also a logical colour which should facilitate a specific type of interaction (in which red is more sharp, purple that of wisdom and contemplation and green aimed at reaching novel sustainable solutions).

In the WPP pressure cooker a maximum of 40 people can walk around and work creatively on Wicked Problems. The optimal number of persons in the Plaza is probably around 20. The cylinder will have white magnetic walls on the inside on which people can write with special markers and stick photos and memos. The cylinder reaches to the ceiling. In the cylinder colored lights will serve the purpose of demarcating the four phases and giving this space a specific atmosphere that stimulates head, heart, hands or collaboration in varying sequences.

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[3] In the ethics literature the hands metaphor is regularly used to indicate a particular type of problem: 'the many hands dilemma', the 'dirty hands dilemma', the 'entangled hands dilemma', See Kaptein and Wempe (***)

The WPP presents a flexible format. It can have many functions, depending on the stakeholders involved. It primarily functions as an idea-generator and a methodology to help those involved to co-create constructive and inclusive solutions. By careful facilitation, the WPP provides a mechanism to help identify: the layers of the problem; what has been tried already; why these efforts failed and what can be learned from those experiences to help find new solutions. It is also a day in which stakeholders can meet each other in a relatively 'safe' environment where their different ideas and interests can be explored as part of a shared vision for a world in which the Wicked Problem is addressed. The hope is that this will lead to better respect and understanding between stakeholders both about their individual and their shared interests and the trade-offs and dilemma's that they face when dealing with the Wicked Problem. It will help to create common ground from which collaborative solutions can be co-created; new steps can be planned and further action agreed.

Six pillars

The WPP also has six pillars. They have a dual functions. They, firstly, serve as the inspirational pillars for the whole of the NWC community and will stay there for a longer period of time. Secondly, at the inside of these pillars there will be room for flexible display in support of the discussion of that moment (the topic of the day). Semi-permanent displays can possibly be used at the sides of the pillars.
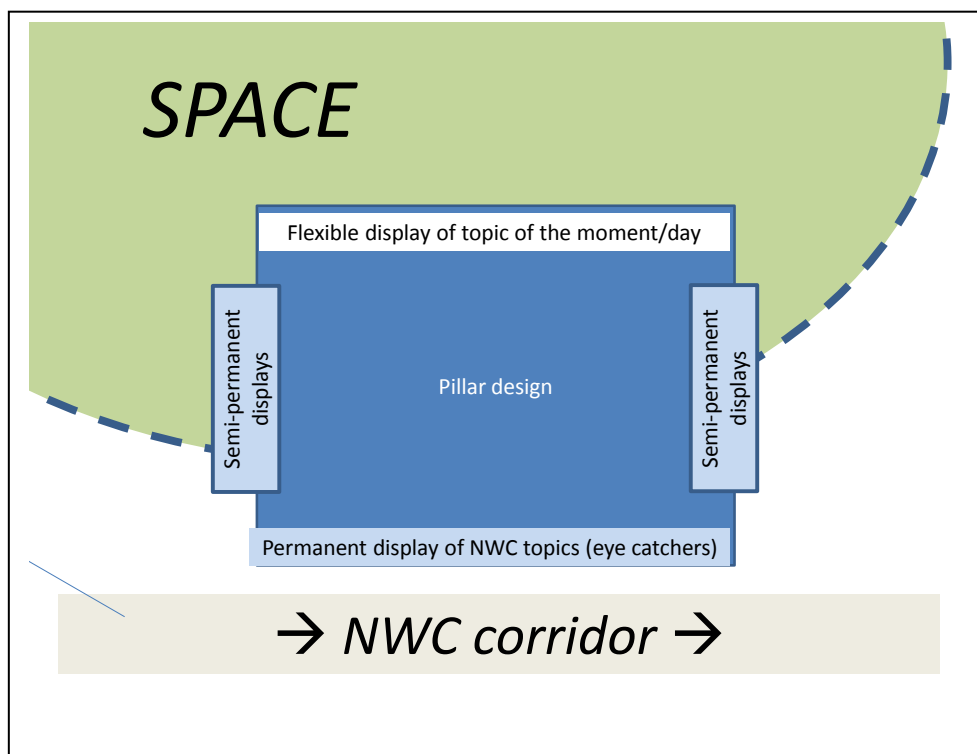
he corridor pillars also the ambitions and discussion of the NWC:((what are the most important problems?); a good intentions pillar (Why do we want to solve it?) a business case pillar (How do we do that?) , a partnering pillar (who is involved?), a brilliant failures and an idiotic ideas pillar. The inside of these pillars will be on permanent display; visitors and flexworkers can always walk in the cylinder and see some results of previous WPPs as well as get to know the general discussions that are taking place at the NWC.

The walls of the pressure cooker will be cleared after each session but the most inspiring results will gain some space on the pillars. The inside of the pillars

Around each pillar, regular activities can also be organized to upgrade the pillar:

[A] An annual meeting on the wicked problems of that year; proposition; for the coming year the SDGs are selected; an important part of this pillar, however, should be dedicated to an ongoing discussion on 'issue prioritisation', which can be fed by the issue rankings as identified by other global organisations as WEF, WBSCD, Copenhagen consensus.
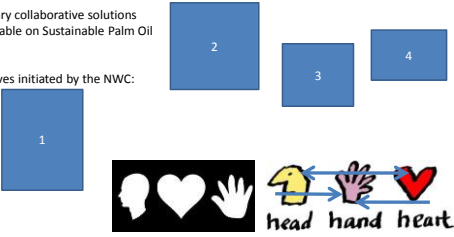
[B] Annual refreshment of the 'good intentions' pillar; each new member of the NWC will add their intentions at entry (separate display) which after a month will be added to the general intentions part of the pillar. The good intentions of the whole NWC can be updated/upgrade every five years

[C] The business case pillar shows inspiring examples from the field of 'best-practice' case; annually the NWC will organize a meet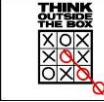ing around these 'best practices' with the question whether they are actually really best practices and what can be learned in general.

[D] The collaborative solutions pillar; portrays creative examples in the field, but will preferably be filled with successful initiatives of the NWC organisations; regular update and always focus of discussion per WPP session

[E] The Brilliant Failures Pillar; can be filled by the institute that organizes the brilliant failures elections; Every year the NWC can organize a special event around brilliant failures; of and on-campus participants

[F] Idiotic Ideas pillar: the same applies to this pillar; the synthesis pillar exemplifies dialectical thinking in practice: thesis (heart) and anti-thesis (head) , can they be combined? NWC organizes an annual idiotic ideas evening in which perhaps also past ideas can be brought together, but also new instant ideas are introduced; the WPP become a speakers corner!

[A] Wicked problems pillar [what are the most important problems that the NWC wants to address?]	**[A] The Wicked problems Pillar**
	
	• Wall of problem and issue rankings according to influential societal stakeholders:
	  – WEF global risk assessment
	  – WBCSD vision 2050
	  – UN: MDGs → SDGs
	  – …
	• Problem of the week/month
	• Annual piority themes of the NWC
		D] Collaborative solutions pillar [who and what needs to be invol-ved?]	**[D] The collaborative solutions Pillar**
			
			Exemplary collaborative solutions
			•Roundtable on Sustainable Palm Oil
			• ****
			• ****
			• initiatives initiated by the NWC:
			
			2 3 4
			1
			
			head hand heart

[B] Good intentions pillar [why do we want to solve it? Intentions of all NWC participants for the year 2020]	**[B] The Good Intentions Pillar (intentions of the NWC citizens)**	**[E] the trade-off pillar (how to deal with the trade-off between heart and head in particular)**	**[E] The splendid failures Pillar** – Examples of good intentions, gone wrong? – Learning experiences, shared with others – What went wrong at the NWC? – Develop with ' institute' voor briljante mislukkingen:

[C] Business case pillar [how can they be solved?]	**[C] The business case Pillar**
	
	• Inspirational examples of smaller and larger organisations that developed an inspirational business case and vision:
	  – Technological solutions
	  – New organisational forms
	  - Inspirational mottos and missions
	  – Examples of NWC
		F] the synthesis pillar (how to practice dialectical thinking)	**[F] The Idiotic Ideas Pillar**
			
			• Nieuw leven inblazen: ' instituut voor idiote ideeen' (Den Haag; bestaat dat nog)?
			• Post-its met ideeen
			• Jaarlijkse idiote ideeen avond

The importance of colours

Discussions and negotiations are influenced by colours: of the environment and of the clothing of participants. The associations of colours can vary per culture and probably also per issue. But in general some universal association are founds such as that red and green are almost always considered opposites, in which red relates to aggressive, and green to relaxing. As to clothing for instance an experiment has shown that negotiators wearing a red shirt were able to sell coffee to the other participant for a higher price than participants in a white shirt.[4] The WPP will actively experiment with flexible colours in support of creating effective environments for collaborative solutions. Initially each of the space has been assigned a primary colour, which however can be made flexible depending on the experiment, the intentions of the participants and the nature of the sequence chosen. For the basic positions we have chosen a number of relatively primary colours.

SPACE	COLOUR	METAPHOR	NATURE/QUESTION	INSPIRATIONAL PILLARS
1. Interest	Red	Hands	What is at stake? Who is involved? Get your hands on the problem	Wicked problems
2. Equity	Purple	Heart	What is my intention/ passion?	Good intentions
3. Efficiency	Blue	Head	What is rational, pragmatic and feasible? What worked?	Business cases
	Mixed	Head vs heart	How do head and heart relate? Splendid failures	Trade-off
	Mixed	Head, heart and hands	Brainstorming about out of the box solutions; idiotic ideas	Synthesis; paradoxes
4. Collaborative	Green	Multiple heads, hearts and hands	What are real (out-of-the-box) approach to (come to a solution for) the problem	Collaborative solutions

[1] RED: interest space: to indicate seriousness of problems; what is at stake, what is the issue at hand? (many hands, many opinions, many interests dilemmas) → INSIDE THE BOX THINKING

[2] PURPLE: equity space: to stimulate people to go into their hearts and understand their deepest emotions and passions → THINKING OF A BETTER BOX

[3] BLUE: efficiency space: to think clearly and concisely on what feasible and realistic solutions or approaches to the problem have been or can be thought of; also think in terms of trade-offs → THINKING OF A BIGGER BOX?

 [4] GREEN: collaborative space: to think of collaborative and innovative solutions to the problem → THINKING OUTSIDE OF THE BOX

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[4] Example drawn from bachelor thesis: M. de Feiter (2011) the effect of the colour green on negotiations, Tilburg University

Triangulation: bringing the right stakeholders to the Plaza

Every wicked problem has at least three dimensions that define its nature as well as possible directions of solutions.

- **Public good/value** nature of the problem: to what extent can the problem be classified as an insufficient implementation of the primary roles of governments (public goods provision on a non-discriminatory basis)
- **Private goods/value** nature of the problem: can the problem be solved by market-based approaches, in which companies provide private good on an exclusive basis (competition)
- **Social goods/value** nature of the problem: to what extent can the problem be efficiently addressed by citizens themselves without interference of governments and/or firms? Social goods provision is often provided on a partly exclusive but non-rival basis (for the group)

The distinction between different goods and values is derived from economics. One can thereby distinguish between the degree of rivalry and the degree of exclusion. Goods and values are called 'rival' in case the consumption or usage of it prevents simultaneous consumption or usage by others. This is the case with most consumption goods: the consumption of an apple prevents another person to profit from it. Because of their rival nature, consumption goods are more easy to produce in an efficient and profitable manner. Non-rival goods do not prevent others from consuming it at the same time. In case this involves an unlimited number of people, we talk about 'public goods', in case the number of people needs to be limited in order to enable to serve/good or value to be delivered we talk about 'club goods' or 'social goods'.

		Degree of exclusiveness	
		Excludable	**Non-excludable**
Degree of rivarly	**Rivalrous**	**Private goods** (food, clothing, cars, parking spaces) **Private values:** For-Profit, competition, reward, entitlement	**Common goods (common pool resources)**; Fish stock, timber, coal, water, **Common values:** Common heritage; health;
	Non-rivalrous	**Club/social goods** Cinemas, private parks, satellite television; ground **Club values:** Non-profit; Belonging; trust; amily, tribe; group interests	**Public goods** Television, air, national defense **Public values:** Non-profit; Justice; safety'; security; non-discrimination; public health; public interest

Source: based on Crones, Sandler (1986); Van Tulder with Van der Zwart (2006)

The matrix indicates products – which is very common in economics literature - as well as values – which is less common, but more fundamental. The WPP first looks at values and problems which need to be attributed to different societal spheres as well in terms of responsibilities and solutions, and only then considers what types of products/services can be produced to adequately address the problem. The four dimensions of problems can therefore also be portrayed as a triangle in which each societal actor can approach the problem from a different angle in which they have the greatest possibilities, well developed strengths and experience to create value. The search for collaborative solutions to wicked problems is based on exploiting the strength of each actor, not as a compromise of its weaknesses. In the WPP this strength of each participant also includes its intellectual strength in articulating a variety of angles to the issue (arrows in the triangle).
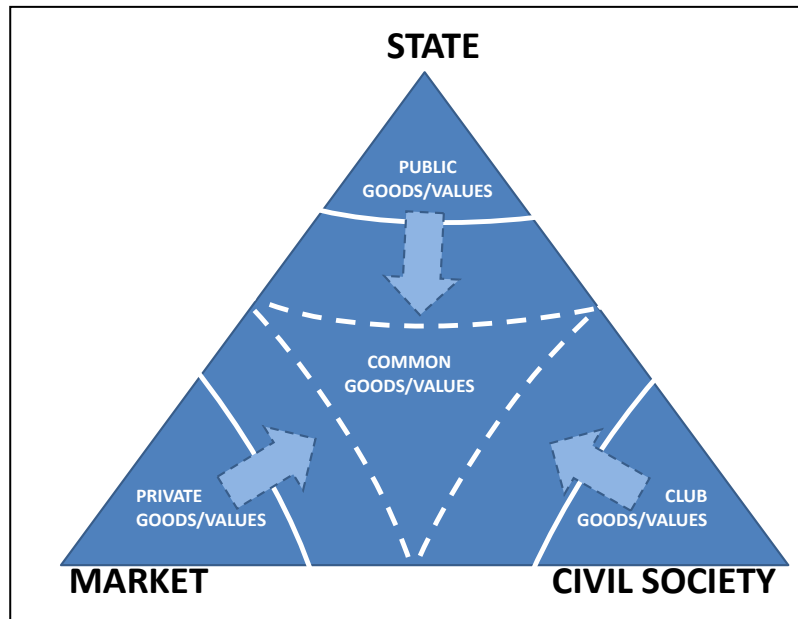
The wickedness of the problem makes it more difficult for one stakeholder to solve the problem alone. This is particularly the case for common pool problems but it can also be created because one stakeholder is not taking up its primary role in producing 'sufficient' public/private or club goods. For most of the wicked problems, each of the spheres of society can be part of the problem and part of the solution. Each sector has a different way of organising and also different ways of innovation on addressing the problem. The success of the WPP session strongly depends on an adequate representation of each of these spheres. The approach of the WPP plaza will therefore be – amongst others – to define where important stakeholders fall short of possibilities, where they can and perhaps should broaden their scope – alone or in collaboration with others - and which problems fall in between every sphere and thus require collaborative solutions in the first place. The latter problems have also been referred to as the 'tragedy of the commons' – problems that affect us all, but for which nobody can and will take the (sole) responsibility.

It is important to have different stakeholders represent in a live interaction for understanding the wickedness of the problem. Many stakeholder engagement processes bring 'coalitions of the willing' to the table. Unfortunately, the very nature of wicked problems makes is mandatory that solutions are created by 'coalitions of the needed', which makes stakeholder selection and representation all the more important for the practical as well as intellectual success of a WPP meeting. To deal with this problem, make sure that from each of the three societal spheres in any case relevant stakeholders are identified and represented. This can be done in four different ways:

- **Presence**: by actually having those stakeholders present; requires a good invitation policy and the guarantee that these stakeholders are open to share dilemmas and are willing to think constructively on a collaborative vision.
- **Simulation**: by asking some of the participants to take the position of these stakeholders (helps also in understanding and respecting these positions). Sometimes it is even impossible to have stakeholders present. For instance in case you would like to have 'future generations'

be represented in the meeting. Be prepared in any case to ask some participants to take up a role (can be alterating roles in the same session).

- **Support**: by having a resource person that can formulate what is at stake for others or what dimensions need to be taken into account as well. In case of very wicked problems, the resource person (or an informed facilitator) becomes more important, because stakeholders themselves are not always able to fully understand what is at stake for them. The facilitator should pay particular attention to this possibility (which also requires preparation).
- **Advocacy**: another technique used is to ask one of the participants to play the 'devil's advocate'. This technique is not necessary when all relevant stakeholders are actually represented.

The two first options are to be preferred over the latter two options.

Nature of interaction: from position-based to vision based

The WPP brings stakeholders together. The formula of the WPP is to use combinations of various deliberation techniques simultaneously: this can range from negotiation, debate to dialogue and sociocratic methods. None of these techniques alone are sufficient to address wicked problems[5]. Stakeholder meetings are no panacea for wicked problems. In fact, when ill-construed, they very often enhance problems because of skewed representation, vested interests and the like. But the most important weakness in stakeholder meetings lies with poor discussions, brainstorming and dialogues – which are theoretically all related to poor negotiation and decision-making techniques. The wicked Problems Plaza therefore pioneers a new way of negotiation, decision-making and dialogue: collective vision based negotiations.

'Normal' (classic) negotiations are often based on positions and 'winning' the game (winner takes all). This type of negotiations or decision-making processes is often organised as a debate in which parties try to convince each other of their approach and insights. In case of a simple problem, this might actually work. The debate focuses on defining all the relevant dimensions of the problem and then can lead to a solution in case both parties would agree that a compromise is needed to solve the puzzle. With more complex problems, in which great and conflicting interests are involved, however, this type of deliberation does not suffice. More modern types of negotiation have been introduced by Fisher and Ury in their seminal work 'getting to yes' (1976) and the following Harvard negotiation project. They introduced the idea of 'interest-based negotiations'. The parties look at trade-offs and try to figure out how and under what conditions they can strike a deal, also taking into account some of the (perceived) interests of the other party. The stakeholders then represent so called 'coalitions of the willing' which can lead to very interesting compromises and solutions.

However, this type of negotiation has not been able to solve the remaining wicked problems of our societies. What is needed is not a zero-sum game, but a positive-sum game. For this the WPP has developed a new approach, which on the one hand defines the most relevant dimensions of a problem (see above) and on the other hand proposes a specific sequence in negotiating around an issue. The biggest challenge in many wicked problems is not? to see them as a 'paradox' for which 'out-of-the-box' thinking is required with all relevant stakeholders.

One way of illustrating the difference between these three negotiation approaches can be found in a quote of the new chair of the Dutch Social Economic Council (SER) (Table), who defined the fundamental precondition for effective negotiations as having an understanding of the 'interests of your opponent'. This is a typical 2.0 approach to effective negotiations. The table shows how that

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[5] Elsewhere, we discussed why it is important to move beyond the dialogue as a general means of involving stakeholders; the challenge has been to make stakeholder dialogues 'strategic' (cf. Kaptein and Van Tulder, 200*); in the context of the WPP it can be supposed that particularly strategic issues relate to wicked problems.

differs clearly from the position-based practice (1.0 approach), but also defines what a 3.0 approach would look like. The latter illustrates the WPP approach.

Thinking hats and interaction types

1.0: Position based negotiations	2.0: Interest Based negotiations	3.0: Problem/ collective vision based negotiations
"it starts with trying to understand your own position and your own interests. Next you try to represent these to your best abilities in negotiations with your opponent. Then you are going to search for common points, where you can define compromises. Which you are going to work towards. In case you are getting stuck, a mediator can help."	*"It starts with trying to understand the interests of your opponent. What does he want, what drives him, what position does he take? Next you search for points of common understanding. You are going to work towards that. And in case you are getting stuck, humour can be an immense help."*	*" It starts with tyring to understand het nature of the problem and the identification of involved stakeholders. In principle, there are no opponents nor supporters, but problem owners and parties with diverse interests and insights. Short term and long term interests are made explicit. You try to come to a joint/shared problem analysis and develop a common vision, on the basis of which you design a realistic implementation trajectory. And in case you are getting stuck, joint investment in learning and knowledge exchange – next to a sensible dose of humour – can help tremendously"*
Hypothetical conflict mediator	Marriette Hamer (chair Social Economic Council SER Magazine, september 2014)	"Hypothetical partnership broker
dilemmas	trade-offs	puzzles	Paradoxes

Willingness to contribute

One of the problems of effective interactions is that parties are not willing or not able to contribute. The philosophy of the WPP is that both dimensions are related. Very often parties think that they are not able to contribute, which therefore lowers their willingness to contribute. In other instances parties think they have vested interested in the continuation of the problem, which will certainly lower their willingness to contribute. But these interests can also be short-term, and even misguided. The fear of losing a position (even if it is perverse and even proven detrimental to the actor involved) provides a much stronger motivational incentive for people and organisations than the possibility of gaining something. So, next to real interests, this psychological dimension has to be taken into account in the WPP deliberations, certainly when actual stakeholders are involved. Some of the sequences of the WPP are designed to 'loosen-up' participants from their vested or perceived interests.

Another dimension, however, is also that parties often do not realise what kind of contributions they can actually bring to the table for addressing a problem. Therefore it is vital also to further elaborate this dimension by:

- First asking parties whether they are willing to contribute
- Secondly, what that might entail (what is their repertoire)
- Thirdly, using the WPP sequence to make them aware of (1) the greater need to contribute (<u>urgency</u>) and perhaps even (2) help them think of new ways of contributing that they had not thought of before (or considered detrimental to their interests).
- Fourthly, one important challenge thereby is to have parties thinking about contributions that link to their core activities, which would be a real and sustainable contribution (rather than philanthropically or subsidy-oriented contributions). A very strong precondition for partnerships – and therefore also for collective vision-based negotiation – is that parties understand how working their contribution can be related to their core competencies and activities.

The question whether and how participants are willing to contribute, sharpens the discussion in the session, because it defines the possible implementation tools/mechanisms available and thus helps the facilitator to check whether the full potential of the meeting can be used. A successful meeting combines the collective contributions of sufficient (groups of) stakeholders to create a collective approach. By way of example: for a pilot session on a wicked problem, the following list of possible contributions was drawn for the stakeholders present:

actor	contribution		actor	contribution
consumers	Pay/buy?		Ngos/cso	Investment, subsidy
government	Regulation/ temporary (start-up) subsidy		distributors	Payment, co-creation
suppliers	collaboration		Knowledge institutes	Learning, monitoring
financiers	Investment/loans		competitors	(pre-competitive) collaboration

The physical experience of thinking hats

However, even when all parties are willing to collaborate and open-up their minds, the discussion can go wrong. Parties can be too much involved in the issue with their 'heads' (mindset), 'hearts' (beliefs) or 'hands' (practices and investment). An essential function of the WPP plaza is therefore to create actual spaces and related physical experiences through which participants are stimulated to use different 'thinking hats' and discussion and decision-making techniques that help them in a relative safe environment to nevertheless go beyond their 'comfort' zone or perceived interests and contribute to constructive solutions:

[1] deepening: The WPP should give participants a physical experience and thus help them to concentrate on a particular way of thinking and discussion, through which they can explore common themes even if they represent different stakeholder/interest groups;

[2] confrontation: in the WPP particularly 'head/efficiency' and 'heart/equity' dimensions can be juxtaposed, while the same counts for 'problems/interests' and 'solutions'. The space facilitates that these insights are confronted in a constructive manner. The in-between pillar on 'trade-offs' is especially meant to get these distinction sharpened. But it should also lead to discussion on what to do about these trade-offs. Is it a real trade-off or is a synthesis possible?

[3] opening up: The final space (partnering space) requires parties to look for a synthesis of the above dimensions. This requires strong 'brainstorming' techniques, 'out of the box thinking' that can

be fed by the 'synthesis' pillar, which lists 'idiotic ideas' and all previously listed insights in the session.[6]

The extent to which each of these dimensions can be served depends on the (1) preparation, (2) the group composition, (3) the availability of resource persons inside or outside of the groups, and – most important – (4) the available time. The WPP takes stock of deeper insights in many of the social sciences (and based on game theory) in order to create four spaces that provide the relevant decision making dimensions. The challenge then becomes how to address each of these dimensions in the right sequence and the right intensity.

Timing:

- Very short: the real pressure cooker effect; challenge: how to use the spaces in a pragmatic manner; one of the techniques that can be applied here is to split up the group in sub-groups that can work separately on one dimension of the problem. Then 'confront' these group with each other (around the trade-off pillar for instance) to discuss the various dimensions of the problem and possible solutions.
- Longer: the pressure cooker effect can be created by using possible sequences a number of times with ever shorter periods of time;

The next section provides some scenarios for quick or long sequences in making use of the WPP space.

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[6] In the Skill Sheets addendum for the Education of the Heart symposium (2014), a number of these out of the box thinking techniques were applied to major wicked problems. See that document for further illustrations. As regards the basic and fundamental problem as addressed by the wicked problem plaza – how to combine head, heart and hands – the proposed solution thereby was; 'to use the warmth of your heart, to keep your head cool and your hands productive'. A good facilitator of the thinking process should be able to open up the minds of the participants to come up with this type of approach. It requires that you free creativity with the group, but also that you remain critical to 'easy' or 'lazy' thinking. For instance a synthesis is hardly ever a 'win-win' solution. It is something completely different! See the brochure to get inspired!

Sequences: five ways to use the pressure cooker

1. Problem driven sequence: 1→2+3; 2←→3 → 4

The most logical sequence is the one in which a 'wicked problem' is given, a group of interested people gets together to address the problem from different sides in other to explore the possibility of collaborative solutions. The sequence then will be:

[1] Hands space: understanding the various stakeholders involved

[2] Heart space: defining what their intentions and ambitions are or could be

[3] Head space: looking at already existing possible solutions and understanding their pro's and con's

[2←→ 3]: understanding the trade-offs and dilemma's that exist between heart and head approaches

[4] Partnering space: constructively work on a synthesis in which practical, pragmatic and collaborative approaches are formulated for the issue at hand

2. Technical/company solution driven: 3 → 1 → 2 →3→4

The Wicked Problems Plaza can also be used for an organised discussion around a proposed solution. If so, the starting position is at the business case side of the WPP in which an individual or organisation presents their 'solution'. A company or organisation comes with a seemingly straightforward technical solution for one of the wicked problems. The biggest challenge for

the wicked problems plaza is now to define whether this solution is adequate to the actual problem at hand. And whether there are underlying problems and mechanisms that can make the problem more complex – even wicked. The WPP in this case functions as a thinking space in which participants go through participatory learning loops in order to link the proposed solution to the problem and think about unintended and indirect effects. Too simple solutions can create additional problems.

In case the solution, however, seems effective, the WPP changes in nature: the stakeholders are asked to think of their willingness to contribute to the implementation of this solution [2]. How can the initiative be linked to their own intentions and organisational/business model [3]? The next step [4] in the sequence then becomes how to implement this collaborative solution.
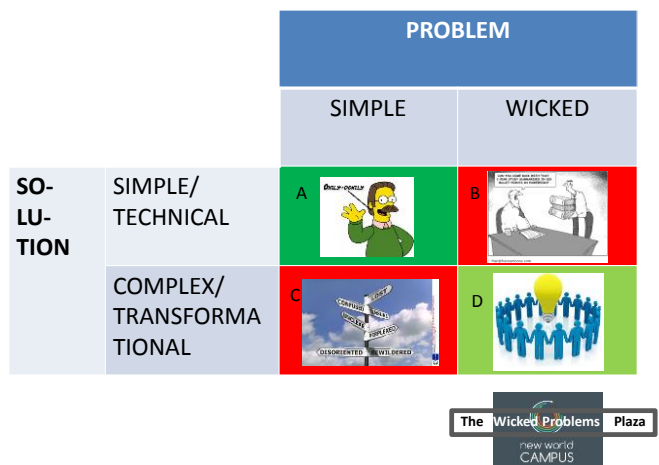
3. Ethical (solution) driven: 2 → 1+3 → 2 →3 →4

Ethical approaches to problems are often presented as dilemmas. You are in favour or against. Ethical motivation then easily becomes an ideology or a 'rule', which in turn contributes to the wickedness of the problem. So one of the most important checks on this kind of reasoning is the extent to which the approach actually addresses the root-causes of the issue [1] and whether it is efficiently organised [3]. In case the proposed ethical solution matches the problem, the nature of the WPP session becomes how to organise it and efficiently join forces with other stakeholder groups that are part of the problem and thus have to become part of the solution as well.

4. Reflective sequences: 1→2→3;→1→2→3; 1→2→3→4

The WPP provides the possibility of participants to go through learning loops in order to accumulate deep insights into the problem. The WPP is then used for a number of probably quick rounds of reflection and interaction.

- Round one: first order loops; focussing on the technical sides of the problem
- Round two: second order research loops: focussing on the organisational side(s) of the problem.
- Round three: third order loops: focussing on the societal side of the problem

5. Creative sequence: 1 ←→ 3; 2←→1; 3→ 4

The aim of a creative sequence usage of the WPP is to generate many possible solutions to a problem. This is called divergent thinking. The WPP session then is organised primarily around the interface between 1 and 3. The basic function of such a session is to use the power of positive examples and brainstorming to identify as many as possible approaches to the (wicked) problem. The synthesis pillar can act as temporary note-board for all possible approaches. It thereby can list two types of

[a] idiotic ideas: an idiotic idea is intended as an out-of-the-box solution for a particular wicked problem, but it is not sure whether this actually works.

[b] splendid failures: a splendid failure is loaded with good intentions and interesting approaches, but it is not sure why it actually failed

Both idiotic ideas and splendid failures then require further discussion and consideration for which the WPP then provides the space. This is the 'convergence' phase of a creative session. First, by linking the idea/failure [1] to the intention [2]. Where the intention is right and related to the right problem [1], there is probably a trade-off between the intention (heart) and the actual problem (hands). The facilitator then moves towards the efficiency space and organises a discussion around the feasibility of the approach and the lessons learned of the (previous) failures. The involvement of different stakeholders in the session is important here, because they can share (from their own perspective) why initiatives have failed, but also what the collaborative conditions could be to make it work in another attempt. The discussion then moves from whether an idiotic idea is acceptable [2], via efficient [3] to implementable [4].