The Future Workshop:
Democratic problem solving

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Abstract
The origins, principles and practice of a very popular method known as The Future Workshop are presented. The fundamental theory and principles of this method are presented in an introductory way. In addition, practical guidelines to carry out such a workshop are outlined and several types of applications are shortly described. The crucial importance of both the facilitation process and the use of creative tools in team work are enhanced.

Keywords: Future workshop, problem solving, facilitation, social fantasy, creativity, group work

1. Introduction

"Dreams, not desperation make communities survive". This slogan was written on a wall of a shantytown in the outskirts of Lima, a community that has developed from nothing to become a well-functioning town. Visions, collaboration and hard work have been the factors that have transformed a desert into a well-developed town. To create dreams about the future is an important task for many groups of individuals and organizations both in grass root activities, public institutions and small businesses. To create visions is the ability to think about the future with great imagination and wisdom.

In general, to change or transform the actual situation of a system you can use two main approaches:

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- First to criticize the actual situation, them to dream about a preferable future situation, and finally to find ways to move from the actual situation to a preferable one; or
- First depict a future preferable situation, then analyze the actual situation, and finally find ways to move from the actual situation to a preferable one.

The Future Workshop (or FW for short) belongs to the first category of approaches that emphasize: critique, learning, team work, democracy, and empowerment. This makes FW as a method suitable to support oppressed groups that are struggling for a better living and a better Society. FW has analogies to the sociological school known as Participative Action Research (Whyte, W.F. 1991). This can be seen in its focusing on facilitated and participative group processes to deal with real-life problems. FW has been developed as a method to support the political struggles of community groups for a better enforcement of their interests to create a better future worth to live for. The creator of this method, Robert Jungk, wanted to enable and support the development of social fantasy that should lead to conflict resolutions that can be turned against the business-as-usual and the profit-seeking of the establishment. FW seeks to support group creativity and to create group synergy for individuals that are in the same oppressed situation.

FW is a very popular method used in many different situations. This method has been used in communities, municipalities, NGO´s and small firms. Unfortunately, most applications have not been reported in accessible journals or publications. There is a lot of literature in German and Scandinavian languages, but in English there is only one book that is not easily accessible (Jungk, R. and Müller, N. 1987) and somehow methodological is outdated.

The main purpose of this paper is to give a practical and theoretical insight to FW, enhancing both practical guidelines to carry out such a workshop and methodological reflexions. The main purpose is to make this fundamental introduction so self-contended that the reader should be ready to organize or participate in a FW.

In Sec. 2 the origins of FW will be outlined. The five phase of FW approach will be presented in Sec. 3. Practical guidelines to carry out FW will be introduced in Sec. 4. Limitations and problems of the method will be outlined in Sec. 5. The art of facilitation, a central activity in FW, will be discussed both in Sec. 6 and Sec. 7. Creative tools will be introduced in Sec. 8. Finally, the conclusions will be depicted in Sec. 9.

2. Origins
Originally the idea and approach behind FW started in the fifties. Robert Jungk (1913-1994), an Austrian writer and journalist, organized in this time structured meetings for a group of citizens with some join problems. The main purpose was to activate a basis, which through a join critique of the establishment was able to develop a proposal for a desirable future. The idea is that a group of people should cooperate to create ideas and strategies for the future. Therefore the name Future Workshops that is a direct translation of the German name "Zukunftswerkstätten".

Jungk, the father of FW, has been inspired to design this approach from three main sources. First, socialist principles related to democratic, participative, and collective decision making by critical citizens that will become emancipated individuals, becoming their own attorneys before the state. Critique exposes, reveals, and unmasks the actual situation. Therefore, FW starts with a critique phase. Jungk worked as a film producer in the Spanish Civil War where he collaborated with anarchist socialist groups in their programs to design non-hierarchical, decentralized, and collective decision-making processes. Secondly, Jungk was inspired by Alex Osborne, an American researcher of creativity and innovation, and his work on creative problem solving (Osborne, 1953). Osborne developed the well-know brainstorming technique, this technique is used in the second phase of FW, the fantasy phase. And thirdly, suitable methods used to create and develop new ideas. These methods are based in the activation of the intuition of individuals, synergy effects in groups and critical potentials that can contribute to the creation of an alternative. The first applications of the concept in FW were used in Germany in the seventies as a tool in the political fight of civil action groups for a better enforcement of their interests to create a future worth to live for. FW were used by community groups in municipalities, local centers, trade unions, etc., where it was experimented with this form of social activity to create social fantasy in a problem solving process.

FW has developed in the practical world and not in academia. A huge amount of real-life applications, evaluations and experiences over a long period of time has contributed to its final shape. Jungk writes (Jungk, R. and Müller, N. 1989) that the first workshops were not successful. It is first when in the political arena of European democracies concepts as citizen initiatives and citizen influence were present that FW were used in practice. Jungk mentions as a good example 28 workshops carried out in Nordrhein-Westfalen with the participation of around 500 people. These workshops were organized and financed by the public authorities to get ideas about the design of human-friendly information and communication technologies to be used in the region.

FW is primarily used by local groups to deal with local problems and find alternative solutions to the one proposed by the establishment. FW is usually denoted as a "green" method because of its wide application to environmental issues and problems. Later, it has been introduced in innovative firms that want to practice a more democratic and creative management style. Now this method is around fifty years old, but the emancipating approach making use of creative working processes and using facilitation technique is by no means out-of date. More recently, FW has been used as a working method of self-controlled learning and a method applicable in the design of new systems, processes and artifacts. The fundamental idea that FW should be a tool in the social development of communities is still alive.

During the last years FW has been used by firms and public institutions, hierarchical and non-democratic organizations, in their planning activities. Here the concepts of empowerment and social learning are not present at all. These workshops are mostly legitimations of the decisions of these organizations.

When Hitler came to power, Bob Jungk was a 19-year-old student in Berlin. Following the Reichstag fire he was arrested for anti-Nazi activities and deprived of his citizenship. With luck and the help of friends he was released, went to the Sorbonne in Paris, but later returned to Germany to work for a subversive press service. Before long he was forced to flee to Czechoslovakia. The fall of Prague took him to Paris and the fall of Paris took him to Switzerland. Even here he was jailed for his outspoken condemnation of the Nazis. After the war he returned to Germany, took a degree at Zurich and traveled widely.

From that time on, Jungk set his hand against oppression in all its forms. By 1952 he completed *Tomorrow is Already Here,* book highly critical of the emerging uses of advanced technology in America. But the focus of his subsequent work turned upon a trip to Hiroshima in the early 1950s. It was here that he met a number of people who were dying of radiation sickness. The major themes of his life's work were forcefully impressed upon him: the power and potential destructiveness of modern technologies, the corresponding need for careful foresight and the constant struggle to preserve human qualities in the brave new post-war world.

His work seems to fall into perhaps three broad phases. First was the painstaking research on nuclear issues, both military and civil, emerging in books like *Brighter Than a Thousand Suns* and *The Nuclear State.* There followed a later period spent looking for, and developing, ways of responding to the challenge. This produced *The Everyman Project* and, much later, *Future Workshops.* During this time he was one of the founders of the World Futures Studies Federation. He was the President (and one of the inspirations for) the London-based Institute for Social Inventions, now a well-established seedbed for innovative ideas.

In later years he became a kind of 'elder statesman' of the futures field, and an inspiration both to fellow futurists and many other people. In the late 80s he persuaded the city of Salzburg in Austria to support the establishment of the Robert Jungk International Futures Library. Here in elegant rooms overlooking the fast, grey river that bisects Salzburg, he founded one of the great repositories of futures material in the world. He later ran for president of Austria and suffered much personal abuse.

He did as much as any, and more than most, to identify the central dangers of this most dangerous of centuries. It is therefore no exaggeration to describe him as a kind of 'one-man' revolution.

Jungk's view was that if people use the powers that are available to them, then the future, as a 'place to live in', is far from being lost. He denied being an optimist, and claimed to be 'a pessimist who still believes that not everything has to be bad'. He felt that the important thing was to create contexts for social innovations; places where people can take ideas. 'From these seedbeds emerge the projects, the real practical changes that over time move our civilization from its present self-destructive course.' *Robert Jungk, the Austrian honorary President of the London Institute for Social Inventions, died in July 1994*

Table 1. Extract from Global Ideas Bank (http://www.globalideasbank.org/)

3. FW's phases

A "classic" FW according to Jungk, R. and Müller, N. (1987) consists of five phases:

- *The preparation phase*: Here the themes, the invited participants, the methods, their rules and the time table of the workshop are settle by the organizers of the workshop and the facilitators. The room and local facilities for the workshop are settled.
- *The critique phase*: Here the problem is critically and thoroughly discussed and investigated. Brainstorming is the preferred creative technique follow up by a structuring and grouping of ideas in some main sub-themes.
- *The fantasy phase:* Here the participants try to work a utopia, to draw an exaggerated picture of the future. Brainstorming and other creative technique might be used. The social fantasies of the participants are developed in this phase.
- *The implementation phase*: Here the ideas found are checked and evaluated in what concerns their practicability. An action plan is elaborated.
- *The follow-up phase*: Here the action plan is monitored; eventually changes are performed and if needed new FW's are planned.

Below each phase will be further discussed.

3.1 The preparation phase

This phase is concerned with the organization, planning and management of the workshop. This is a crucial phase because many problems that arise during the workshop are usually due to bad planning, poor organization and/or unsuitable physical environment.

Central questions in this phase are: Who are going to participate? What is their background and motivation? Should we invite some special groups? Should FW be totally open or the participants should be invited? How long time should be the duration of the workshop?

Thereafter, suitable locations and rooms should be found. It is recommended that the room is suitable adapted to the group creating a cozy, informal, and inspiring atmosphere. Different materials should be available: paper, pin boards, pencils, tape, 3M Post-It blocks, copy machine, transparencies, lab taps, projectors, toys, etc. Fruits, cakes, soft drinks, tea and coffee should be available during the pauses. This demand of a suitable working environment is not a special demand of FW, but many other forms of workshops give similar guidelines.

Another important issue is the specification of the theme or the problem that FW will be focusing on. The formulation should be carefully discussed by the organizers of the workshop and the facilitators. Ambiguity should be avoided. The question: Is FW an appropriate method to deal with the situation on hands? should be carefully discussed.

Another important aspect is that the participants should be well-informed about the purpose and principles of FW, so that they will feel easy and positive by participating on the workshop. It is advisable just before starting the FW, to plan a simple warm-up exercise for all the participants.

A very important assumption of FW is that all the participants are equal in the democratic problem solving process. This assumption has to be checked in each situation because is not easy to implemented in practice. Participants have usually different background, education and experiences and it is not unusual that power relations will be created that have influence in the group working process. It is the task of the facilitators to manage the democratic problem solving process.

In the year 2000, I was going to give a new course: Creativity and Problem Solving. I did not known exactly how to structure this new 14-week course of 4-hour per week. I invited 14 students to my summer house for a 3-day FW. The theme was: **The design of a creativity course for engineers.** I secured, with the help of two students, that all facilities, materials, food and soft drinks were available. The day we went to the summer house everybody was very enthusiastic about participating in such a workshop.

3.2 The critique phase

This phase will draw out specific issues and problems in questions; the objective is to establish a critical understanding of the theme and the problems in question. In a first step, a visualized brainstorming is carried out and a general and critical question concerning the problem is framed. The critique points will be written down in 3M-post it's or in big sheet of papers. In the classical FW all participants write down the points on a big sheet of paper lying on the ground or on a table. Later, the points are cut out and grouped. This method creates a stronger nearness than isolated note writing. Usually, this idea generation is made in groups following the brainstorming rules: criticism is ruled out, free-wheeling is welcomed, quantity is desired, and combination and improvement is sought.

In a second step, the results found are written down and systematized in clusters accordingly to topics, each cluster is entitled. The modern structuring technique known as Mind Mapping has shown to be very useful here. The whole Mind Map will be shown in a pin board or in a large wall.

In modern creativity terminology the first step is called the divergent process while the second step is the convergent process (Vidal, R.V.V. 2004). In FW the divergent phase is supported by the brainstorming technique, but other techniques can also be used by the facilitator depending on the experience of the group and the problem in question. The convergent process can be supported by different tools as matrices, lists and maps. The advantage of Mind Mapping is that the whole situation can be visualized. Then, a topic could be taken again for a further divergent process; this will mean only the extension of the Map. All creative processes are composed of a divergent and a convergent process. It

is the task of the facilitator to manage these processes and to allocate suitable time to them. Some groups do not like to diverge and want to converge as fast as possible (for instance businessman) while others do not like to converge (for instance artists).

It is always surprising to see the number of topics and ideas generated for each topic after one hour brainstorming. It is impossible to continue the workshop working with all topics and ideas; therefore a prioritization of the importance of each topic by the participants is needed. If through dialogue it is not possible to agree on a prioritization a simple votation system is recommended.

We began Friday afternoon, by going running to the forest. We ended bathing at the beach. After eating, we began with a 3-hour critique phase. All students were presenting in short form all the bad experiences they have had following courses at the university. Brainstorming was used for this divergent process. There were many ideas. They were structured using a Mind Map in the convergent process. Ideas were then categorized as: to be definitely avoided, to be avoided, or it cannot be avoided but we should find ways to deal with it.

3.3 The fantasy phase

This phase is also partitioned in two steps: a divergent and a convergent process. In the first step all participants try to create a utopia, to draw an exaggerated picture of future possibilities. Generally known solutions should be avoided and non-verbalized and intuitive knowledge should be enhanced. The participants should suggest solutions without reflecting about restrictions, traditions or other barriers, that is search for unconventional solutions. Suitable creative tools could be introduced as: fantasy trips, meditation, medial support, role plays metaphors, picture stimulations, story telling, etc. Central questions are: What would we do, if there were no constraints, plenty of resources, and no restrictive laws…? What would we do, if a fairy fulfils us all our wishes? One can also begin by turning the critique points into their opposite (negation of the negation). From this point of departure, the participants can use brainstorming techniques and creative games to discover and to reflect utopian ideas. It has been found that brainwritting can be more suitable at this step than the traditional brainstorming. The ideas and solutions found are collected and put in a bank of ideas, regardless of their practicability. It happens that ideas that are unrealistic today might be implementable in one or two years time due to radical changes in the economic, social and political environment.

In the second step, the most promising ideas have to be transformed, that is, they must be reduced to a possible and realizable core. Ideas have to be prioritized after a common analysis and evaluation. A SWOT matrix (Sørensen, L. and Vidal R.V.V. 1999) could be used to evaluated ideas strength and weakness as well as the possibilities and risks in connection to the problem to be solved. Mind Mapping could also visualize the different elements of a solution as well as its interrelation to other solutions.

It is in this phase that the social fantasy of the participants is developed and synergy effects in the group are reached. Ideas, proposals and solutions are achieved in a creative and innovative way. These results will not have been found following a rational problem solving approach. This has a creativity promoting effect, because in FW, in a very relaxed atmosphere, far away from the stress of everyday life and profession, expression forms can be found and ideas and solutions may outcrop which could possibly not be discovered by using a direct and rational approach.

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On Saturday, at breakfast time, many students were talking about their dreams. Most of them have been dreaming about bad and good teaching experiences. During the morning a divergent process was carried out using different creative techniques: brainwritting, storytelling, picture stimulation. After a 2-hour break for lunch and walk out in nature, the convergent phase started. Different Mind Maps were elaborated for the best ideas. Many of the ideas were related to form, content or the structure of such new course. Some propositions were easy to implement while others demanded some extra resources. At night after dinner three groups were established one should make a performance, the second a song and the last one a game. After one-hour work all groups performed. It was really fun.

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3.4 The implementation phase
Here the ideas from the last phase have to be seen with more realistic eyes and have to be adapted reality, to achieve suggestions for one or more projects that are possible to implement. This phase is composed of several steps.

First, all the ideas of the data bank are further discussed to assess the probability of that solution or idea of being implementable. If there are many ideas one has to select the most promising for further study. These are done by discussing each utopia and eventually modifying them to make them more probable to be implemented.

After these critical evaluations probably more information is required in form of expertise from different areas: economical, technical, social and political. This supplementary knowledge is added to the further evaluation of how realistic and probable is the implementation of a given project.

The next step is to formulate clearly the most promising ideas in form of maps and diagrams. Moreover, a SWOT analysis could be carried out for each project with the purpose of developing an implementation strategy. The strategies should visualize the economic aspects and the political reactions caused by the selected projects. The most promising projects are selected. Finally this step end with an Action Plan that specifies: Who does what, where, when and how?

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On Sunday morning the work was concentrated in the design of the creativity course including as many ideas as possible that were suggested in the fantasy phase. The 14-week course was divided in three sections: first, introductory lectures about relevant topics with practical exercises to train some tools (4 weeks); secondly. oral

presentations by the students about creative methods (4 weeks); and students work in a project whose results will be presented the last day of the course at a conference (6 weeks). It was agreed that from the beginning the students should be part of a group of 4-6 individuals. It was also suggested that some guest lecturers with some special expertise should be invited. By lunch time, a complete detailed course was designed. My role was manifold: I was going to be the teacher of the course so I could refuse to crazy or expensive ideas; I was the facilitator of the group work and I also was an expert due to my knowledge of the field creativity and problem solving processes. FW ended with an evaluation of the whole workshop and the different processes. The general conclusion was that the workshop was a very positive experience, everybody has learned something, and everybody was ready to organize another workshop.

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3.5 The follow-up phase

FW should end with an agreement of the elaboration of a report that collects all the achieved results and presents the action plan. Such a report should first be send to all participants. After the conference ends, the facilitators prepare a report which is sent to all participants and the board of the organisation in question. This report contains:

- The complete ideas, projects, visions and objectives produced by each sub-group in both the divergent and convergent phases of the conference; and
- An evaluation of the different processes and activities carried out at the conference (the learning process and group dynamics).

In addition the workshop should end with an evaluation of each participant of the working process that has been gone through. The central questions are: What was good? What was bad? What did we learn? How can wee do it better next time?

If it is needed, it is also possible to discus the idea of organizing another workshop for some specific issues. This is getting close to the idea of a permanent workshop. Another important activity is the question of communicating to the external world the achieved results; this can be done by writing about FW in the newspaper or contacting another media.

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The course on creativity and problem solving started in year 2000 following the same structure and content as developed in the workshop. Several evaluations show an enormous positive enthusiasm by the students about such a course. Some of them have for the first time experienced collective learning, team work, student's emancipation, responsibility for his own learning and a teacher being a facilitator, and expert and a supervisor. The many comments of the students have caused small improvements every year. The students are coming from many different countries from Europe and also some few outside Europe. They expressed that in their universities they did not have such a course. This multicultural aspect has given a new dynamics to the course. The structure and the contents of the course can be seen in Vidal (2003).

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Critique phase
- Generate and collect critique issues (brainstorming)
- Structuring (clustering of ideas using Mind Mapping)
- Evaluation, Focusing, Prioritization

Fantasy phase
- Imaginative warm-up (fantasy plays, storytelling, games, meditation...)
- Turn critique into the opposite (negation of negation)
- Generate ideas (brainwritting)
- Analysis and elaboration of great ideas
- Register the ideas in a bank of ideas

Implementation phase
- Evaluate the register ideas
- Formulate in concrete terms the best ideas
- Choose the very best ideas (prioritizing)
- Action plan

Table 2. The main phases of FW and their central activities

4. Practical guidelines

While planning and carrying out FW is important to reflect about the following practical aspects of the workshop:

- *The themes:* Reflect always about the suitability of FW to the problematic situation on hands. The most suitable themes are those with community concern, community knowledge and experience, and the participants are willing to take responsibilities for action. The projects can be real, for instance: the establishment of a youth center; or more abstract as: the role of IT in primary schools. It is not a good idea to choose projects that are far away from the experience and the knowledge of the participants.
- *The number of participants:* Jungk and Müller recommend that for FW the number of participants should not be bigger than 15-20 persons, to secure that all will participate in an active way. If there are more participants it is a good idea to cluster the participants in groups and run parallel workshops with the same theme; then at plenum sessions ideas, solutions and projects can be presented after each main phase of FW. Workshops with 8-12 participants can become very creative, synergetic and dynamic if suitable facilitated.
- *Group work:* The success of FW is determined by the effectiveness and creativity of the group work. If the participants are invited to the conference it is recommended to use some selection criteria. It is clear that selecting the participants and distributing them into sub-groups is a very important task, which has to be solved seriously in order to develop effective group work and high

quality results. A person with knowledge of the local community and experience with working together with people from the organisations involved should undertake this task. In connection with the group work in FW there are two social processes to be managed: the problem solving process and the group process. The problem solving process is the way the sub-groups in the conference act to solve the task of generating ideas and visions going through divergent and convergent phases. The group process is related to the manner in which the individuals in the group work together, how they learn, how they communicate, their social and power relationships, and how they deal with conflicts. Obviously, these two processes interact in various degrees. In ideal group work, these two processes support each other. We talk about **group dynamics**, when energy and synergetic effects are created in the group work as a result of well-balanced processes where the task is just as important as the group trust and identity. In FW there is a third social process: the facilitation process. In the next section this subject will be more extensively discussed.

- *Time-table:* There is not a specific standard duration of FW. There is very much variation just from one hour to a whole week. Obviously, the obtained results are conditioned by the duration of the workshop. The total duration will then be allocated to the different phase of FW. The most common is one-day or three-day workshops. Usually more time is allocated to the fantasy and implementation phases. For example in a three-day workshop, the time table could be: Critique: Friday 18-21 pm; Fantasy: Saturday 10-13 and 15-19 pm.; and Implementation: Sunday 10-13 and 14-16 pm. It is important to have some pauses, for walk out in the forest or by the sea, for social interaction and relaxation.

- *Suitable local and facilities:* It is important that the local and the location where the workshop is to be carried out have properly selected. All the necessary materials and practical tools should be available. The environment (forest or sea) should also be chosen to create a cozy atmosphere. For workshops with many participants, there should be suitable rooms for group work and a big room for meetings in plenum, Jungk and Müller (1987) suggest several ways of arranging the rooms for the workshops.

5. FW: Problems and limitations

Running a workshop in general and FW in particular is a social activity that demands interaction and communication among people that is not always unproblematic. Some of the most common difficulties are discussed below.

5.1 Conflicts in the main phases

In FW it is assumed that a consistent development of topics and core questions occur between the main phases from critique to action plan. This is a very demanding task for the facilitator and the group of participants, and their abilities to solve conflicts. Some crucial questions should be raised at the end of each phase to be secure that there are sufficient qualified ideas and topics to be used in the next phase. Otherwise, the facilitator should use more time, change methods, or change the working form.

5.2 Is a good idea to begin with a critique phase?

This is a crucial question to be raised in the preparation phase. This critique phase might have a demotivating effect. The group might turn desperate about the many complex problems to be faced. Sometimes it is a good idea to begin with an invited speaker that will present a positive story about the theme in question. Other times, when dealing with problems of organizational change it might be a good idea to use SWOT-analysis (strengths, weaknesses, opportunities and threats) to structure the brainstorming process. Then, this critique phase is expanded to a problem identification phase.

5.3 The effects of creative tools

It is not always easy to make a group work creatively. It needs courage to think about a desirable utopia. The facilitator should be careful while selecting creativity tools, the participants might react differently. If the participants are not used to work with their intuitions and feelings, then the fantasy phase might be a very difficult process. But never underestimate people, radical changes in attitude can happen very fast and synergy effects can be created. There is also the question of age, children and young people are ready to play and create.

5.4 The duration of the different processes

The duration of each of the phases of FW is context depending and cannot be predicted in advanced. Sometimes good ideas can be found under pressure of time; but communication, cooperative and collective works take their own time. Long pauses or a night's break might noticeably change the group's dynamics.

5.5 Who will support the group afterwards?

The action plan usually involves the realization of difficult tasks therefore the action group needs permanent support from more experienced groups or supervisors. Therefore after the end of FW it is recommended to address this question and design a backing group for the group who is going to carry out the action plan. Think also about the possibility of permanent workshops.

5.6 The role of the facilitator

The golden rules while selecting the facilitators are:
- Two well functioning facilitators are better than one
- Some tasks demand experienced facilitators
- Confidence between the participants and the facilitators is essential
- The facilitators should be highly motivated by the task
- A good facilitator knows when he has to: "let it go", push or pull.
- A good facilitator is like a director of a performance where good timing is crucial
- You cannot facilitate boxing.

5.7 Power and communication

As a point of departure all the participants are equal and likeminded in FW. In reality, there are of course differences among the participants regarding their social status, their education and experiences, their sex and their age. Since knowledge is power and the experience in communication can be very varied, it is the task of the facilitator to manage

the processes to give equal opportunities to all participants. If there are some hierarchies and conflicts, the facilitator should be able to deal with them in a positive way. It is no recommendable to use FW method in a firm where management wants to know who should be fired from the group of participants. In this situation one thing is sure; the participant managers will not get fire even if the result of the workshop will recommend that.

6. Facilitation as management
The success of FW is determined by the effectiveness and creativity of the group work. If the participants are invited to the workshop it is recommended to use some selection criteria. Some of these criteria could be:

- Representation: participants represent the relevant actors from the different sectors of the community;
- Goal compatibility: participants have similar goals so they can pull in the same direction at the same time;
- Process compatibility: participants agree on the framework and tools used during the conference;
- Deliberation: participants are able to reflect, think and act effectively and in a structured and creative manner;
- Positivism: participants have a constructive attitude to group work and collective problem solving and communicate openly and honestly;
- Communication: participants are able to talk and listen effectively; and
- Focus: participants are able to concentrate on their tasks, avoiding or disregarding any kind of distraction.

It is clear that selecting the participants and distributing them into sub-groups is a very important task, which has to be solved seriously in order to develop effective group work and high quality results. A person with knowledge of the local community and experience with working together with people from the organisations involved should undertake this task.

In connection with the group work in FW there are two social processes to be managed: the problem solving process and the group process. The problem solving process is the way the sub-groups in the conference act to solve the task of generating ideas and visions going through divergent and convergent phases. The group process is related to the manner in which the individuals in the group work together, how they learn, how they communicate, their social and power relationships, and how they deal with conflicts. Obviously, these two processes interact in various degrees. In ideal group work, these two processes support each other. We talk about group dynamics, when energy and synergetic effects are created in the group work as a result of well-balanced processes where the task is just as important as the group trust and identity (Heron, 1999)

In FW there is a third social process: the facilitation process. The facilitators are the managers of the conference and their main mission is to create and support group dynamics. By focusing and guiding group members' communication and decision-making processes in a structured form, the facilitators can reduce the chances of engaging

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in faulty processes and harness the strengths of the group. This can be achieved using the following guidelines:

- Use approaches, for example creative techniques, to co-ordinate members' thinking;
- Specify a set of objective ground rules for the group work;
- Build on the strengths of the group and protect the group against its weakness;
- Balance members participation;
- Support the group while dealing with conflicts;
- Plan time to close the different social processes;
- Make the group reflect and evaluate the group dynamics; and
- Empower the group.

The facilitators are constantly thinking (reflection) and listening to the deliberations in the sub-groups so they can make suitable interventions (decision making). An intervention means communicating with the group, giving information and knowledge, and encouraging the participants to think about important topics.

Let us emphasise that facilitation is a purposeful intervention in a social process, a designed process. Facilitation is not a necessity for the evolution of the problem solving process but it is designed to support the problem solving process. The facilitation evolves very dynamically in a grey zone trying to construct a bridge between the traditional/conservative problem solving (business as usual) and the new/revolutionary power to change. The purpose of facilitation is to seek that the two above-mentioned processes do not destroy each other, but on the contrary support each other. In this way, in relation to FW, the process of traditional problem solving develops into creative problem solving.

The facilitation process can be managed in different manners, as there are several management styles. The facilitators are the managers of this process. Note that if the group can manage itself, there is no need for a facilitator. That is, the group can learn to facilitate itself.

Management also involves three other central factors: Power, communication and learning. These aspects are always present in any facilitation process and should be reflected and articulated before, during and after the workshop. Facilitation becomes an **art** when a synergistic effect is achieved due to the constructive interaction between the rational and the irrational processes.

Summarising, we can state that the purpose of facilitation as management is not only to solve the task, but other additional goals could be:

- Each participant is a potential facilitator, therefore the importance of the learning dimension;
- Empowerment, the participants learn to be more self-confident and learn to work creatively in a group (creativity is an act of liberation from the jail of our own routines); and

- Praxis, the facilitators should be able to learn from the actual experience therefore the importance of the evaluation of the workshop and the systematisation of the actual practice, in addition learning from failure is a good principle for any facilitator.

7. Facilitation as design

Based on the discussions of Sections 3 and 4, it is possible to stipulate that the process of the design of FW can be divided into three stages: The pre-workshop planning, the workshop in action, and the post-workshop output.

7.1 Pre-workshop

It is a common belief that detailed planning at the pre-workshop stage is essential to ensure that the facilitators help to create a group work that focuses on the task and that this needs tight organisation. Moreover, it is also argued that this first stage is as important as running the group work itself because without sufficient pre-planning the chances of success will be greatly reduced. This stage is an extension of the classical preparation phase described in Sec. 3.

On the other hand, it is our experience that too much planning and organisation might kill spontaneity and creativity in the group work. Therefore, a suitable balance should be found, a suitable framework that gives space for the development of the rational and irrational processes, and for adaptive decision-making during the facilitation of the group work.

At this stage, it is of central importance that the facilitators discuss with the organisers of the workshop the purpose, the task, the organisation and the management of the group work. Enough time should be allocated to discuss these themes thoroughly so that, at the end of this stage, the organisers of the workshop and the facilitators have developed a consensus about the objectives and development of FW. This goal compatibility is of extreme importance. In addition, the processes, tools and techniques that might be utilised during the workshop should be discussed. How will the participants react to them? is a central question to be discussed at this stage.

Another important activity in the pre-workshop stage is the collection of relevant information by the facilitators and the dialogue with the organisers of the workshop about central topics and their possible outcome during the workshop, in other words visioning possible processes and creating scenarios of possible outputs. The task should be deeply understood by the facilitators as well as the possible conflict areas. Previous relevant reports from the organisers and reports from similar workshops elsewhere should also be available to the facilitators.

It is also important that the facilitators use some time to outline in detail the agenda and the organisation of the workshop itself. Afterwards, these issues should be discussed with the organisers of the workshop to achieve consensus.

Even at this preliminary stage, the facilitators should think about the last stage where the workshop will be evaluated. An outline of the final report could be made and a simple information system could be designed to be used and filled-up during the next two stages. Some facilitators prefer to use a personal logbook from the very beginning to take note of important information, events, conflicts and decisions; such book will be very valuable in the last stage of FW.

For an experienced facilitator, it is usually sufficient to have two intensive three-hour meetings with the organisers of FW to go through the pre-workshop stage. At the end of this stage a short document should be prepared with the intentions, the task, the agenda, etc. of FW to be sent to the invited participants together with the invitation letter.

7.2 The workshop
At the beginning of the workshop day, it is important that the facilitators explain to the participants the purpose and the agenda, before the work in sub-groups begins. Explain that the agenda can be changed if necessary, and that the time schedules must be respected to avoid waiting times when the participants meet for the plenary sessions.

In the FW, some creativity tools will be used in the problem solving process. The tools to be used have been selected from a huge number of well-known techniques. The facilitators should be convinced that the selected tools are the most suitable for the workshop, but if during the sessions it is detected that the tools are not supporting adequately the facilitator should be capable of switching to other more appropriate tools. The next section will discuss this topic. One thing is crucial: the participants should feel at ease with the facilitator, the process and the techniques used, in this way true participation is ensured. Finally, the facilitators are the managers of the workshop; therefore all the discussions and recommendations of the last section are applicable here.

7.3 Post-workshop
After the conference, the facilitators have to write an accurate report of the experience. This report should include the following themes:
- An outline of the background and purpose of FW;
- The results obtained at each sub-group;
- The evaluation by the facilitator of the work in each sub-group;
- The evaluation of the whole workshop by the facilitators, including good and bad experiences; and
- What did we learn from the experience?

8. Creativity tools
There are a variety of abilities that characterise a creative individual. Four of the key abilities are discussed in this section as well as four tools to enhance them in concrete problem solving situations. They are: Fluency, flexibility, originality and elaboration (Vidal, R.V.V. 2004)

8.1 Fluency

Fluency is the production of multiple problems, ideas, alternatives or solutions. It has been shown that the more ideas we produce, the more likely we are to find a useful idea or solution. To have too few alternatives is not a good thing in problem solving especially if you have to be innovative. There are many tools for producing ideas, alternatives and solutions. Several researchers have shown that training and practice in these tools does result in a better fluency.

One creative tool, which has been used widely with big success for generating many ideas, is Brainstorming. The tool is directed at generating unconventional ideas by suppressing the common tendency to criticise or reject them summarily. In a Brainstorming session no criticism is permitted and freewheeling generation of a large number of ideas and their combination and development are encouraged. Brainstorming is founded on the associative premise that the greater the number of associations, the less stereotyped and more creative the ideas of how to solve a problem will be.

However, nothing in Brainstorming is directed at changing the assumptions or paradigms that restrict the generation of new ideas. This is an excellent technique for strengthening fluency, fantasy, and communication skills. It is a good idea to have a facilitator to prepare and warm-up the Brainstorming session, to lead and support the session, and to evaluate the whole process. This tool gives the possibility for the group to use more than one brain, thus achieving a synergetic effect. Generate a multitude of ideas and some of them will be truly useful, innovative and workable. Asking individuals for input gives them an increased sense of importance and produces an atmosphere for truly creative and imaginative ideas to surface and be acknowledged. Brainstorming can be used for a wide diversity of problems: vision generation, strategy development, planning, policy, organisation, leadership, staffing, motivation, control, and communication. However, this tool is not appropriate for broad and complex problems demanding highly-qualified expertise and know-how. Some of the ideas produced may be of low quality or obviously "generalities". Brainstorming is not a good idea for situations that require trial and error as opposed to judgement. Brainwriting is a form of non-oral brainstorming to which the basic brainstorming rules apply. Participants sit in a circle, write down their ideas for solving a given problem and pass their papers to their neighbours in the circle, who then brainstorm the ideas for a specified period, say five minutes, and then pass the papers to the next person.

8.2 Flexibility

Flexibility is the ability to process ideas or objects in many different ways given the same stimulus. It is the ability to delete old ways of thinking and begin in different directions. Flexibility is adaptive when it is aimed at a solution to a specific problem, challenge or dilemma. Flexibility is especially important when logical methods fail to give satisfactory results.

Looking at modern paintings requires flexibility; they demand looking from different perspectives in order to see different objects, images and symbols. Seeing people or objects in the clouds requires the flexibility of seeing concrete shapes in cloud

formations. Flexible thinking provides for changes in ideas, detours in thinking to include contradictions, differing viewpoints, alternative plans, differing approaches and various perspectives of a situation.

A family of creative tools, known as verbal checklists, has been developed to enhance flexibility in the creative process. Usually this is a checklist of questions about an existing product, service, process, or other item to yield new points of view and thereby lead to innovation. The idea behind the verbal checklist is that an existing product or service can be improved if one applies a series of questions to it and pursues the answers to see where they may lead. The main questions take the form of verbs such as Modify? Or Combine? These verbs indicate possible ways to improve an existing product or service by making changes in it. Then you will add definitional words to the verb, for instance combine ideas, combine appeals, combine purposes, combine units, etc.

Another important tool for encouraging flexibility is the use of provocative questions. These questions will open up a situation to a broader and deeper direction of thinking which otherwise might not be produced or considered. They demand thinking about ideas or concepts that have not been thought about previously. Some provocative questions can be:
What would happen if: water tasted like whisky? Cats could bark? Women could fly?
How is: A PC like a ship? A flower like a cat? A sunset like a lake? A car like a fork?
What might happen if: It never was Sunday? It was against the law to be perfectionist? People were not creative?
Picture what might happen if: By law it was forbidden to have children? Cars could fly? Men could have children?

8.3 Originality
Originality means getting away from the obvious and commonplace or breaking away from routine-bound thinking. Original ideas are statistically infrequent. This is probably because a creative thinker must be comfortable with being different or belonging to a minority, and usually being alone. In addition, the original thinker must be able to withstand the ridicule and scepticism, which will be directed toward his/her ideas and himself/herself. To enhance creativity we have to be respectful of unusual or crazy ideas or alternatives. You can train your own creativity by producing, let us say, one original idea every week.

Originality is a creative strength, which is a mental jump from the obvious. Original ideas are usually described as unique, surprising, wild, unusual, unconventional, novel, weird, remarkable or revolutionary. You need courage to be creative, because as soon as you propose a new idea, you are a minority of one. Belonging to a minority is unpleasant. We have to be more respectful and supportive of originality and creative thinkers.

Creativity research has shown that the individual who produces a large number of alternatives is more likely to produce original ideas. A well-run brainstorming will usually produce many original ideas. Moreover, many art media (clay modelling, drawing, painting, performance, etc.) are conducive to the expression of originality.

Picture Stimulation is a very popular technique used to provide ideas beyond those that might be obtained using brainstorming. The members of the group look at a set of selected pictures and relate the information gained from the picture to the problem. The rules of brainstorming should be followed.

Photo excursion uses the same principles of picture stimulation but instead of using prepared pictures for stimulation, participants are required to leave the building, walk around the area with a (Polaroid or digital) camera, and take pictures of possible solutions or visual ideas for the problem; when the group reconvenes, ideas are shared. Another related technique is the Object Stimulation tool where instead of pictures a variety of different objects (e.g. a hammer, a pencil, a board game, etc.) will be used. Sometimes you can use words instead of pictures or objects, and associate them to your problem.

Originality can also be enhanced by analogies and metaphors. An analogy is a comparison of two things that are essentially dissimilar but are shown through the analogy to have some similarity. A metaphor is a figure of speech in which two different universes of thought are linked by some point of similarity. In the broadest sense of the term, all metaphors are simple analogies, but not all analogies are metaphors. Nature provides a good source of analogies. Poetry is a good source of metaphors. Similes are specific types of metaphors that use the words "like" and "as" – for instance, the wind cut like a knife; his hand was as quick as a frog's tongue, he sees like a condor and digs as fast as a mole. They too can be used to suggest comparisons that offer solutions.

8.4 Elaboration
Mind Mapping is a visual and verbal tool usually used to structure complex situations in a radial and expanding way. A mind map is, by definition, a creative pattern of related ideas, thoughts, process, objects, etc...

Any person from 6 to 100 years can learn to use the technique. The principles are few and easy to understand. The best way to learn it is by practice. After short time you will do it automatically. To make mind maps you have to draw ideas from the centre of the paper and move in a radial and parallel way; to do this you must use both your creative and your logical brain. With some experience you develop your own style, your own pallet of colours, your own symbols, your own icons, etc.

Mind Mapping usually contains the following elements:
- The subject or the problem to be studied or analysed will be placed in the centre of the paper;
- Keywords (names or verbs) are used to represent ideas. As much as possible only a single word is used in a line;
- The keywords are connected to the centrum through a main branch and sub-branches;
- Colours and symbols are used to emphasise ideas or to stimulate the brain to identify new relations; and

- Let ideas and thoughts flow free; avoid too much evaluation during the period of development of the map.

Mind Mapping has been applied to many areas:
- To take notes during an interview or a lecture;
- To attack a planning problem;
- To deal with any problem;
- To take notes while reading a book or an article;
- To make transparencies for a lecture;
- To plan a party or a trip; and
- Many other applications- use your fantasy.

8.5 Divergent and Convergent Thinking

Experience has shown that it is recommended in a creative process to start with a divergent thinking process to produce as many ideas or solutions as possible and thereafter to switch to a convergent thinking process to select the few most promising ideas (Courger, J.D. 1995). This is usually illustrated in the form of a diamond.

Some of the rules for divergent thinking are:
- Image, reframe and see issues from different perspectives;
- Defer judgement; criticism or negativity kills the divergent process, be open to new experiences;
- Quantity breeds quality; to have good ideas you need lots of ideas;
- Hitchhiking is permitted; in this way a synergetic effect can be achieved;
- Combine and modify ideas; in this way you can create many ideas;
- Think in pictures; to create future scenarios you can even simulate potential solutions;
- Stretch for ideas, imaging ideas beyond normal limits; and
- Do not be afraid to break paradigms, avoid destructive criticism, and add value to the challenged concept.

Some of the rules of convergent thinking are:
- Be systematic, find structure and patterns in the set of ideas produced ;
- Develop ways to evaluate ideas, assess qualitative and quantitative measures of ideas;
- Do not be afraid of using intuition; this is the way most important decisions are made;
- Avoid quickly ruling an area out of consideration, take your time or, even better, sleep on it;
- Avoid idea-killer views, try the impossible, do not be afraid to clash against a wall- it is not sure that the wall will always hold;
- Satisfy, do not expend to much time in looking for the optimal solution of an ill-structured multi-criteria problem,
- Use heuristics, use common sense and experience-based rules; and

- Do not avoid but assess risks, it does not mean being blind to risks. For serious consequences be sure to have a contingency plan.

As we have seen, FW contains phases of divergent and convergent thinking. Divergent thinking produces as many solutions as possible within the available time. The participants will vary in the way they prefer to produce ideas; some will do it by association others by unrelated stimulus to enhance fluency, flexibility and originality enhancing the elaboration of ideas. Convergent thinking, on the other hand, requires that the participants use skills in reality testing, judgement and evaluation to choose the one or two best options from a number of possibilities.

It is not unusual that in a group some members will very easily diverge, that is build a list of alternatives, while others will converge very fast by trying to select the best solution from the list and the rest will be passive not knowing what is required of them. Therefore, a facilitator is needed to design a clear and visible process map to align the group. Usually the facilitator does not select the participants of the group; he has to identify the profiles of the participants very quickly. An in-depth discussion of creative problem solving can be found in Vidal (2004).

In the last section, we have a list to be used to select the participants. This list can be used in the evaluation process to see discrepancies between our expectations and the achieved results. The facilitators should try to get some feedback on the conference from the organizers and the participants. This could be done by asking the participants to fill-in a questionnaire that focuses on the learning aspects of the experience. This is of central importance if it is planned to carry out a new conference after some period of time to produce new visions or to develop strategies.

9. Conclusions
FW was presented as a method to develop ideas or projects for community development and problem solving in a participative, democratic and cooperative way. The design of the workshop task embodies the principles of creative problem solving while the social organisation of the group expresses the principles of facilitation of responsible participative democracy.

FW is characterised by three main aspects:
- The focus on group dynamics while other approaches focus on methods or on approaches for task solving as the steering factor
- It is based on modern concepts about the facilitation of creative problem solving processes; and
- It emphasises collective work and collaborative learning through the interaction of the participants with the aim of learning how to build, sustain, and develop responsible participative communities.

We have learned to design, manage, and evaluate FW; the next task is to try to answer the question: What did we learn from this experience? This is the field of the systematisation

of praxis. To systematise is to describe, structure, and reflect analytically on the development of a practical experience, see further Vidal (1991, 2004a).

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