Conflict Resolution in a System

Ways and means to respond to everyone’s needs and someday achieve everyone’s dreams

Article by Gunter Pauli
Founder and Director of the Global ZERI Network
Professor Systems Design at the Science University of Torino, Italy
© 2008, Pauli

Earth provides enough to satisfy each person’s need, but not his greed.

Mahatma Gandhi

Introduction
The capacity to respond to everyone’s needs seems to be a precondition for eliminating numerous root causes of violence. Indeed, how can one ever expect individuals, or a community, to live in peace with neighbors when their most elementary needs for water, food, housing, health care, energy and/or jobs are not being met? The Islamic dictum that those who have more than they need for themselves and their siblings are stealing is not difficult to understand if basic conditions for escaping from this predicament of poverty are not available. Whereas violence cannot be justified, poverty and the injustice related to the unequal access to natural resources do create conflict. The unbalanced access to water in the Middle East, the lack of food in Sudan, and the lack of education and sanitation in Latin America are some of the well-documented cases.

In addition to basic needs, people also have beliefs and paradigms; in short everyone has dreams. The main hypothesis of this article is that when people are pursuing the satisfaction of their basic needs, and aim to reach their dreams, it is bound to lead to conflict since there is a perceived shortage of material wealth and energy to respond to everyone’s desires on this world. Worse, when people pursue their dreams, it leads to immediate conflicts, since all too often the fulfillment of one person’s dream only seems possible at the denial of another’s. This is true if one conceives the present and the future as a single target, weather if it is achieved or not. However, if people can think, design and operate within a system, the pursuit of their basic needs and their higher goals in life, which we simply call dreams, then it

1 The summary bellow is not an expression of what works and what does not work. It is merely an attempt to highlight the differences in approach. The case studies will offer an insight in the logic that lead to this out of the box strategy that is needed when one considers the protracted relations that have evolved over decades, not just years.

2 Gunter Pauli’s academic background is an MBA from INSEAD (France) and he has broad experience in translating [implementing?] technological innovations in projects. He is the founder of “The Global ZERI Network,” and Professor of Systems Design at the Science University of Torino (Italy), where he founded the Master of Systems Design program. www.zeri.org
will soon become obvious that many - perhaps even all- can meet their basic needs, and so many can achieve their -at first sight- opposing dreams.

**We live in an interconnected world**
The realization that it is possible to “have it all” comes only if we accept that we live in a world that is interdependent and interconnected. We are connected to each other, but [and?] at the same time we are connected to our ecosystems. All life in the diverse climates and environments in which we live depend on the interactions and relationships amongst bacteria, algae, fungi, plants and many other animals. Once we understand the interconnected world in which we live, then it is quite easy to imagine a world that will continue to have conflicts, but where each conflict that arises will be used to reach a higher level of understanding amongst all.

On the basis of the above diagrams, projects that have been monitored and in some cases designed by the Global ZERI Network³ have converted the one target approach, sometimes known as linear thinking, into a multi-target approach, better referred to as a systems approach. Without ever considering that this leads to strategies for conflict resolution, the author concluded after more than a decade of field work and project analysis that the successful implementation of systems-based initiatives greatly reduced the risk of conflict, and in some circumstances the existing antagonism has subsided. It is therefore possible to claim that in a “no waste society”, where everything is considered important, where everything gets re-used with added value, and where the hidden connections amongst all animate and inanimate life create such a wealth of opportunities, conflict simply does not make sense anymore.

**Going for half or for a complete dream**
Traditional conflict resolution methodology as proposed by William Ury⁴ and others and well known as “The Third Side”, rests on the approach whereby -in the end- people have to give up part of their dream in order to achieve a common interest. It has been rightly argued that reaching a higher goal known as the "common good" motivates individuals to limit their personal wish list. All parties to the conflict reach an understanding that they can achieve more jointly than by simply pursuing their personal targets. This is a valid argument. However, the following brief case studies highlight the grand chance offered by an innovative

---

³ The Global ZERI Network comprises scientists, vigorous operators, scholars, and entrepreneurs. There are project teams around the world focusing on research, project development, and education: Santa Fe, New Mexico; Durango, Colorado; Curitiba, Porto Alegre – Brazil; Cape Town - South Africa; Kamakura, Tokyo – Japan; Manizales, Bogota, Medellin – Colombia; Bauchi – Nigeria; Sundsvall, Gotland – Sweden; Milano, Torino – Italy; New Delhi – India; Suva - Fiji; Ahlen - Germany; Paris - France.

⁴ William Ury is the author of the book The Third Side [http://www.thirdside.org/]>
approach, which will permit all to fully respond to their basic needs, or completely fulfill their dreams, and still achieve the best possible attainment of the common good.

**From zero waste to zero conflict**
The three examples selected for this purpose are by no means perfect and detailed cases, but these summaries rather offer an inspiration for further research, and a broader analysis on how a creative systems approach could eventually revolutionize conflict resolution in the years to come. When “zero waste” approach to industrial production that was pioneered by ZERI in the early 90s, it did not imply that there is no waste, but rather that whatever was considered useless by one can be converted into something of value to another. The author is not claiming that this approach described below will lead to “zero conflict”, but rather that conflicts are an important occurrence that eventually will lead to a better understanding how one can respond to basic needs and achieve dreams of all without any form of compromise. It is the conflict itself that unveils hidden connections and unrealized opportunities that would never have emerged unless a higher level of discomfort caused by the conflict would have catalyzed a process towards understanding the real world in which we can thrive.

The first case covers a conflict situation in New Mexico, USA, whereby years of lawsuits have put the state and federal government at loggerheads with environmental activists over grazing rights granted to farmers, which are supposedly leading to excessive soil erosion, and over the thinning of the fire prone forests, which some ecologists claim debilitates natural forest evolution. The second case describes the long-lasting stand-off between the landless and the land-owners in Brazil. After decades of incapacity to break out of deep poverty, the poor are driven to extreme actions such as illegal occupation of land. The rich are holding on to their legal rights to land ownership in the wake of massive invasions by the landless, which either lead to evictions by force or to the deliberate destruction of the land by the legitimate owners, leaving it useless for decades to come. The third case comes from Colombia, one of the most conflict-ridden countries in the world, where violence has devastated families and communities for nearly half a century. It is in zones of violent confrontations that islands of peaceful co-existence have emerged. How can one explain that in the country with so much combat, kidnappings and human rights violations one can find communities where for over two decades there has been no combat, no kidnappings and no human rights denunciations?  

**A. Northern New Mexico, USA**
New Mexico is the land of enchantment for many. Whereas the rich and famous like to live between Santa Fe and Taos, and the smart enjoy working in the great research center of Los Alamos, a large majority of the population in the region is suffering from poverty and health levels that are amongst the worst in America. Towns in the north western part of the state could be mistaken for ghost towns. It is in the Northwest that three communities have pursued conflicting goals. At the heart of this region are the traditional Hispanic communities, which established their settlements long before the United States of America even existed. It may be appropriate to point out here that grazing, particularly of sheep, has been an essential source

---

5 All three cases have been designed and implemented independently from each other. The involvement of ZERI ranges from being inspired for decades by the grand work by the vigorous and daring actors on the ground (Gaviotas, Colombia), to the planting of the seeds (Santa Vitória do Palmar, Brazil) and the design of the initial program (New Mexico, USA). None of these projects have come to full fruition, as a part of an ongoing development. None of these initiatives will ever be considered completed, but rather continue on a permanent track of co-evolution.
of livelihood for the traditional communities. More recently, the region has attracted wealthy people who have fled the cities in search of an exceptional quality of life with spectacular nature all around. The third party to the area is the owner of so much of the land, the government at the state (Bureau of Land Management) and federal (Department of the Interior, Forest Service) level.

Many of the new settlers share concerns about the environment and over the years well-informed non-governmental organizations (NGO) have taken the state and federal governments to the courts, asking a ban of (over)grazing, which leads to soil erosion, on one hand, and the other hand stop the thinning (logging) of the forests. The Native Americans represent a third, mainly impoverished community in northern New Mexico. They retreated on their pueblos and observe the conflicts on their land. The local farmers are in despair, since without access to public land for traditional grazing their livelihood is at stake. The state government is in despair because the risk of forest fire is too high, and without thinning the forest of its small diameter wood, that risk persists. The local population of newcomers and traditional communities is stuck in the middle, and few can make decisions since this situation creates uncertainties. The vicious circle turns even more vicious and poverty remains rampant, and the region simply is not able to lift itself out of this trap.

Any attempt to bring all parties concerned to the table would be guaranteed to fail. Each has very well defined, but incompatible goals. However, a deeper appreciation for the hidden assets of the ecosystem makes clear that all can reach their goals, thus laying the ground for social and economic development that typically emerges when there are no conflicts.

A deteriorating ecosystem
The starting point of the project design in northern New Mexico, is the desire to abate poverty, reduce unemployment, work through periods of drought, reverse desertification, opt for quality logging and give hope for change in the near future. The most contentious issue is the decades of poor forest management exacerbated by the lack of rain, which leads to uncontrollable forest fires. The State of New Mexico received the commitment of US$ 25 million to clear small diameter wood in an effort to reduce the risk of wild fires. However, what happens to the collected biomass? Most of it ends up in landfills, decomposing to methane and contributing to climate change gases. It seems like one can do no good without doing harm!

Reality could be different indeed. If one is prepared to think “outside the box,” creative solutions emerge. The small diameter wood and its debris can be treated with native fungi, yielding a restorative soil amendment and an excellent additive to sheep feed after farming traditional mushrooms. However, sheep are, according to some ecologists, part of the cause of desertification. During periods of drought, they continue to search for nutrients and moisture by nibbling on any root they can find, leaving the area prone to erosion. If the fungi-treated forest debris could supply 25 percent of the feed, then the efforts to reduce forest fire could contribute to the reduction of the risk of desertification and the need for grazing?, while reducing the operating costs of the sheep farmer who is suffering from a sharp decline of wool

---

6 The Santa Fe, New Mexico based NGO SCI/ZERI New Mexico has undertaken the scientific research in collaboration with a research team lead by Dr. Ivanka Milenkovic from the University of Belgrade. First all native mushrooms were classified, then a spore bank was established to propagate all species with the aim of undertaking soil restoration, mushroom farming including the production of animal feed from biomass waste. For more information <www.scizeri.org>
prices. This leads to a positive loop whereby the concerns of the environmentalists and the state are fully met, while the local community gets more competitive in what it has been doing for centuries.

When we study systems, it has been said by visionaries like Fritjof Capra that the flapping of the wings of a butterfly in Rio de Janeiro could cause a storm in Canada. Systems are interconnected and create effects -positive and negative- we often cannot imagine at the outset. Now the well-intentioned and well-conceived, efforts to reduce risk in one place could also reduce another risk in the same place and makes the economy more efficient. This reduction or even elimination of adverse effects sounds like a realistic proposal for the future. More detailed scrutiny of the opportunity reveals a virtuous circle with further possibilities.

The merger of culture and tradition
The Spaniards introduced sheep to the Americas some 400 years ago. Native Americans who found a fertile ground for experimentation with their vast knowledge of natural coloring, quickly adopted the animals. The Navajo and Hopi cultures developed a magnificent set of applications for dyed wool used in carpets and clothing. Sheep and wool became a symbol of their culture, while the Hispanics also remained loyal to their sheep farming tradition. The sheep's wool absorbed the natural color easily, offering a product of higher value, than the mere sale of a pound of wool. While the color indigo\(^7\) was already well known in Europe, cochineal\(^8\) proved to be a particular success. No one had ever seen such a bright red, extracted from a bug, which was stable and easy to apply.

It was demonstrated by the Picuris Pueblo that thinning the forest, a necessary surgical intervention to undo shortcomings of past forest management to reduce the risk of fire. This cod lead to the restoration of the forest land increasing the top soil through the treatment of the debris with a fungus, and the preparation of substrates for traditional mushroom farming, which left-overs turn into food for animals with another fungus (it is great to learn about biodiversity). This new approach permits the environmental organizations, the government and the local farmers to feel satisfied without any of them having had to give up their goals and dreams. The local community can now expands knitting sweaters and weaving carpets, taking their raw materials and coloring techniques to an ever higher level of value added. Expanding into sweater-making emerges from a deeper understanding of the system possibilities. It is facilitated by the forest project, but is otherwise independent. This sweater that you see ... is not a sweater. The sweater you see the result of interplay between immediate needs for jobs and revenue, as witnessed in the local communities in northern New Mexico, and the traditions of the Hispanic communities. It is the result of a dynamic exchange between Native Americans and the natural colors based on abundant minerals of the Rocky Mountains. The sweater - an object for sale- crystallizes into the symbol for conflict resolution. It provides a platform for innovation providing feed for animals, water uses changing alfalfa farming for local color pigments, revenue generation and a vision about the possibilities to survive in this global market, through working with what you have and what is readily available. Even if the rest of the world thinks that you have nothing and live in

---

\(7\) The chemical color indigo with the molecule consisting of carbon, hydrogen, nitrogen and oxygen \((\text{C}_{16}\text{H}_{10}\text{N}_{2}\text{O}_{2})\) is derived from the plant \textit{Indigofera tinctoria}. [Does the reader need this? The critical question is whether this chemical comes from plants native to the Southwest, as well as from the Old World.]

\(8\) The red color is derived from the insect \textit{Dactylopius coccus}. 
poverty. It makes humans more responsible in dealing with the land, and permits the government to reduce hazards for the local population.

**B. Santa Vitória do Palmar, Brazil**

Whenever one visits Brazil, there is talk about the rich South and the poor North. It is true the North is very poor, but the South is evolving towards poverty. There are an estimated 80,000 HA of fertile land dedicated to rice farming. This crop was introduced over a century ago. Large landowners have dominated the scene but a drop in world market prices for rice, combined with the obligation of the state by the World Bank to stop subsidizing fertilizers came hard for the farmers who soon found themselves stuck with a large debt to the banks. The banks were face-to-face with a tough decision, foreclose on the debt-ridden farmers, and become the owners of the majority of rice land, or extend more credit and risk not meeting their debt payments. In a country where the government owns the banks, foreclosure is not an obvious choice, especially when there is a third group known as the landless, well represented by the MST\(^9\). For decades, the landless or MST have requested a redistribution of land, in order to build up their livelihoods, though no government has ever been able to overcome the deadlock of taking unused land from the rich and make it available to the poor ready to work the land to achieve food security. The economic crisis only complicated matters even further.

The banks are only prepared to extend new loans if there is a new cash flow. It is impossible to expect a better cash flow from a depressed world market. The farmer can only get new investment funds if there is new revenue, since there is no upswing expected on the world market. The landless will only renounce their survival strategy of invading land if their most basic needs for food, water, shelter and health care are being met. No one expects that the banks or landowners are in a position to meet those needs. As a result, poverty will further diminish local resources and the road to a generalized impoverishment leads to the exodus of children from the region. The most important dream of the landowner is to be able to imagine a future for his children at his home.

The starting point for resolution of the conflict is once again seeing the connections between phenomena that were considered unrelated before. A rice farmer knows how to farm rice. There is only one product generated from the land, but if farming rice requires access to water. The water in the South of Brazil is very alkaline and it readily grows scum that the rice farmers have been eliminating that scum forever. Once scientists from the local university recognized that the scum floating on the paddies was a protein-rich algae known as *Spirulina*\(^10\), it became obvious that the rice farm is not only the generator of rice and all its

---

\(^9\) Movimento sem Terra, a movement regrouping individuals who are prepared to invade land in a desperate act to survive.

\(^10\) The research project is initiated and managed by ZERI Brasil and includes the identification and classification of the native algae, the demonstration of the production system, and the social system required for an efficient distribution of *Spirulina* to the children. The landowners donated land to ZERI Brasil in order kick-start the process. By the year 2005 the production is up and running and now the project team is upscaling the units in cooperation with coal fire electric power stations and in February 2008 the first pilot plant was inaugurated with the objective to farm algae for biodiesel.
by-products such as straw and husks, but a rice farm in this part of the world is ideal to farm Spirulina, which commands a premium price on the world market. Perhaps even better, Spirulina is ideal for combating malnutrition.

The logic that emerges is easy to follow. The farmer engages in the production of Spirulina. This generates additional revenues, which will help reduce the risk exposure of the banks. The financial community is now prepared to provide additional funds. However, the Spirulina is not simply to be sold on the international market, it is first and foremost used to fight malnutrition in the region. Schools are mobilized to distribute the protein- and mineral rich algae. Once a month, each one of the mothers of the children will prepare cookies for the kids. Each cookie is laced with one gram of Spirulina\(^{11}\) at the cost of merely one cent. This any mother can afford and is prepared to afford once she realizes the health benefits for the child taking Spirulina every day.

The additional revenue is thus alleviating malnutrition. However, the rice farmer never knew about Spirulina. The farming and harvesting requires not only additional investments, but it also necessitates extra workers. The farmers agree that the “natural system” produces more income than ever before, so a portion of the extra sales is needed to pay for investments and workers, but this windfall profit created by the natural system is to be shared with the people living off the land, having no land. It is always easier to share when the cake increases in size. This is what happened in Santa Vitória do Palmar.

This system addresses the basic needs of the landless through the creation of new jobs and there clearly is a better food supply. It is difficult to imagine that a banker would come up with the solution of the Spirulina farmer. It is difficult to imagine that the rice farmer will come up with the idea to convert the scum to a commercial product. It is difficult to imagine that the landless will emerge as the providers of the solutions to the banks and the landowners. Though reality is that all are part of the same system and all contribute to the solutions desperately needed by each other. The way to resolve the conflict-ridden situation is to secure that the children have food, that the banks have less risk, and the farmer generates more cash flow. The first step is to demonstrate scientifically that the biological process at the core of this solution is not only documented and predictable, but that there is solid peer-reviewed research substantiating it. After all, the landowners and the banks can take risks, but it is impossible to expect the communities living on the edge to participate unless the proposals are solid.

C. Las Gaviotas, Colombia

Perhaps the most violent country for decades has been Colombia. The country is rich in everything, but somehow it succeeds in maintaining over 50% of the population in poverty. It has been stated that the only thing that is sustainable is poverty in itself. Whereas the country farms on 4.1 million HA, there is a vast savannah on the Eastern side with some 6.3 million HA unexploited. This area known as the Llanos Orientales of the Vichada, is the home of a magnificent experiment initiated and directed by Paolo Lugari. A large majority of the local

---

\(^{11}\) The world wholesale market price for Spirulina platensis is approximate 16 US dollar per kilo. The Spirulina for the school children can be produced at a cost of 50 cents per kilo, and sold at 1 dollar directly by the farmer, leading to a 100% margin, representing 1,000 dollars per ton, whereas rice is barely fetching 200 dollars per ton.
population suffers from gastro-intestinal diseases due to the lack of potable water. The region sees the presence of all possible groups including guerillas, paramilitaries, but all share the same predicament: limited access to drinking water.

The typical solution to the lack of drinking water is the digging of wells, but these mechanical tools break down and spare parts are simply not available. The typical solution for gastro-intestinal diseases is the provision of antibiotics, but medicine is not easily stored in an appropriate fashion, because there is no electricity, and hence no refrigeration. Thinking out-of-the-box leads to the discovery of connections in the natural system that can provide a lasting solution.

The main reason for the bad quality drinking water is the low pH of the soil. When water percolates through an acid underground there are hardly any beneficial bacteria, and as a result parasites and viruses thrive. The unconventional solution that emerged is the regeneration of the tropical rainforest this region once used to be before cattle farmers arrived 450 years ago and converted the forests into plains with non-native grasses, while subjecting these to slash and burn for centuries. Whereas at first this hypothesis that the destruction by cattle farming could be reversed was a mere hypothesis, over two decades of reforestation demonstrated that it is possible to produce large volumes of potable drinking water. Las Gaviotas decided to distribute the water locally for free. Now that everyone had access to this precious precondition for life, new social conditions emerged.

It would have been impossible to imagine that someone would have called the violently opposed groups to the same negotiation table, have them sit in at a round table and agree that the time has come to produce drinking water for all. The only approach was do it, and to secure that over time the provision of drinking water is guaranteed to everyone forever, thanks to the diligent regeneration of a rain forest based on a symbiosis of a fungus with the local pine tree species. The mycorrhizal fungus pre-digests nutrients for the young tree permitting it to survive in harsh conditions. The new forest increases precipitation, since the green cover proves shade and reduces the temperature. The additional rainfall is now filtered though a soil of a much higher pH, and the whole leads to system whereby ever since the water arrived, conflict has subsided leading to a peaceful environment in a sea of violence. Whereas 70 percent of the population used to suffer from gastro-intestinal diseases, the abundance of drinking water eliminates one of the most stressful challenges any mother faces.

The power of a dream
Nothing is possible if there is no vision, no perseverance and no desire to convert dreams into reality. It was Paolo Lugari, the founder and director of Las Gaviotas, who observed that: “Maturity in life is reached when you realize your dreams.” There is not a single mother who brings a child into this harsh world who does not dream that her baby will be better off than she is (was). There is not a single child who does not wander through the first decade of its life without dreaming, which goes beyond what seems “feasible.” Many dreams are only possible if we are prepared to implement them.

Some Common Characteristics
The first fundamental difference in the initial approach to conflict resolution in a systems-based approach is the design of an overall strategy that does not require the conflicting parties to meet thanks to a trained mediator. On the contrary, the mere energy needed to bring all parties to the table would undermine any chance of ever making progress. Who could imagine
the environmental activists who have sued the state and federal government for decades would share the same room with the farmers whose mere tradition and even existence is potentially undermined by wrangling through the legal system? Who could imagine that the landowners would share a meeting room with the landless at the outset of a protracted process and if a mediator were ever successful, that this roundtable exchange would lead to a common vision about the future? Who could imagine that the guerrilla, para-military, farmers, military forces and the state representatives could ever share the same table? These cases demonstrate that this roundtable approach simply cannot be applied when there are such deep-rooted and long-standing conflicts, which have continued over generations. That is why another approach imposes itself.

1. **NO NEED TO MEET**

The three case studies demonstrate that what is needed is the draw up the multiple ways for each to achieve their goals and demonstrate on the ground that it is possible to get out of the box in which everyone has been trapped.

2. **SEEING THE SYSTEM**

After someone imagined the whole system, and unveiled the interconnectedness, then the only way to show that this is a viable option is simply by doing it. There is so much talk and these parties to the conflict are all under so much stress that they have heard enough. The only language that speaks is implementation the suggestions without wasting more time. So the second fundamental difference from conventional conflict resolution is that these solutions do not require any consensus prior to action on the ground. Rather, the lack of progress over the past decades requires first and foremost a demonstration of the capacity to change course “here and now”. Unless one can deliver quickly on some of the most important basic needs, or some of the most critical components that provide a pathway to achieve a dream, there simply is no confidence-building process. However, once the first objectives are met, then the initiators of the projects like Lucio Brusch, Paolo Lugari and Lynda Taylor, as described in the case studies above receive the benefit of the doubt.

3. **TAKING ACTION HERE AND NOW**

The third difference with the traditional conflict resolution is that after the initial vote of confidence has been obtained from the respective participants in the system, the continuation remains focused on each of the individual needs, without forced meetings of the parties. Though at this stage, each party to the system knows that the other is willing to proceed knowingly involving the other, without having to deal directly with the other. The only way to achieve this is the demonstration beyond doubt that this new way of looking at the same reality leads to tangible results, over and beyond the first fast track achievements that were described. This requires the results to be documented and independently reviewed.
4. PROOF BEYOND DOUBT

The individual and separate interests are pursued. There is no need to call anyone's attention to the fact that the adversaries are also meeting their needs. It is often counter-productive to insist that the “enemy is happy” as well. The deep-rooted anger over decades of mistreatment, lack of understanding or even dialogue could quickly undermine any advances made. It is critical to focus solely on what one can do for each individually and separately so that all energies can flow towards the meeting of basic needs and achieving dreams. Only when the participants in the system have well advanced on that path, then the whole system can be unveiled. Then everyone realizes that the long term sustained success of the process that one has embarked on is actually part and parcel of a complex system that is so intertwined with the goals and dreams of the (now former) adversaries. However, since it is now clear that the meeting of basic needs and long term goals are in no way diminished, hampered or even at risk, on the contrary, it is possible to achieve one’s own objectives if ALL achieve ALL their objectives. The change of attitude towards the “other” becomes part of the new way of life, since no one has to give up anything, no one is obliged to reach consensus with the enemy, no one is required to give up 50% of a dream. All can pursue 100% of their dreams.

5. ALL IS POSSIBLE IF ALL ACHIEVE ALL

The role of the mediator is different than or at least very complementary to any of the 10 roles described in the book by William Ury. The three main functions are that of (1) a system designer, (2) the scientific certifier, and (3) a vigorous operator, implementing round-by-round (instead of step-by-step) whatever is needed to keep all parties on track. In the first role, the mediator unveils the hidden connections and shows how all can become part of that same living system. In the second role, she or he proves beyond any scientific doubt, based on facts and research on one hand and based on this person’s track record on the other, that the proposals are viable. In the final role, the mediator produces the tangible results offered by the uncovering of the system connections and the validation. In the cases outlined below below, there simply was no other way to proceed. Indeed, the mere fact of speaking for the weaker player, or the balancing of power does not provide results on the ground.
### Conflict Resolution

<table>
<thead>
<tr>
<th>Preparations</th>
<th>Third Side</th>
<th>Zero Conflict</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Round Table</td>
<td>Individual Dialogues only with each person or community as part of a system</td>
</tr>
<tr>
<td><strong>Basis for Conflict Resolution</strong></td>
<td>Identifying common goals and interest</td>
<td>Identifying goals for each separately, then connecting the dots of the system</td>
</tr>
<tr>
<td><strong>Basis for Confidence Building</strong></td>
<td>Sharing common goals, agreeing on joint implementation, giving up some to get more than conflict for decades</td>
<td>Quickly achieving some basic ends that are tangible, surprising but measurable and creating a basis for more progress.</td>
</tr>
<tr>
<td><strong>Basis for continued collaboration</strong></td>
<td>Consensus building whereby the agreed common good has enough for each, motivating individuals to reduce conflicting expectations</td>
<td>Continuing system implementation with fast track achievements whereby everyone can achieve 100% of their pre-conflict resolution goals and dreams</td>
</tr>
<tr>
<td><strong>Roles of the Third Person</strong></td>
<td>Provider- Enabling people to meet their needs Teacher- Giving people skills to handle conflict Bridge-Builder - forging relationships Arbiter- Determining disputed rights Equalizer- Democratizing power Healer- Repairing damaged relations Witness- Paying attention to escalation Referee- Setting limits to fighting Peackeeper- Providing protection</td>
<td>Systems designer - imagining the whole system, the interrelations and finding out how everyone can reach their goals and even dreams Scientific certifier - studying the system that was designed and making certain that scientifically this is perhaps innovative and creative, but certainly viable Vigorous implementer - combining the vision of the system and the science and securing that it becomes economically viable with some quick short term results</td>
</tr>
</tbody>
</table>

Gunter Pauli likes to express a special thanks to Dick White for the diligent and detailed commentary plus editing of the text. The remaining confusions and errors are the sole responsibility of the author.