WICKED PROBLEMS AND NETWORK APPROACHES TO RESOLUTION

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Introduction

Government officials and public managers are encountering a class of problems that defy solution, even with our most sophisticated analytical tools. These problems are called "wicked" because they have the following characteristics: 1). There is no definitive statement of the problem; in fact, there is broad disagreement on what 'the problem' is. 2). Without a definitive statement of the problem, the search for solutions is open ended. Stakeholders – those who have a stake in the problem and its solution – champion alternative solutions and compete with one another to frame 'the problem' in a way that directly connects their preferred solution and their preferred problem definition. 3). The problem solving process is complex because constraints, such as resources and political ramifications, are constantly changing. 4). Constraints also change because they are generated by numerous interested parties who "come and go, change their minds, fail to communicate, or otherwise change the rules by which the problem must be solved" (Conklin and Weil, no date: 1).

Wicked problems can be distinguished from other types of problems in the following way. Type 1 problems, or what I call "simple problems," enjoy a consensus on a problem definition and solution. For example, a group of machinists agree that a machine has broken down and they also agree how to fix it. Problem solving is straightforward engendering little if any conflict among those involved. Given their training and experience, these problem solvers, within a short period of time, recognize what the problem is and activate established routines and standard procedures to deal with it.

Type 2 problems introduce conflict to the problem solving process. I call them "complex problems". Although problem solvers agree on what the problem is, there is no consensus on how to solve it. Consider the following example. Suppose a community comes to understand that students are not learning in school as judged by their test scores. Stakeholders then become embroiled in debates on the 'best way' to improve student learning. Some suggest an increase in school funding, while others demand better teachers and new pedagogical tools. Some support programs to improve students' home environments while others call for restructuring of the educational system to allow for vouchers between public and private schools. Type 2 problems generate conflict among the stakeholders. Despite agreement on the problem definition, there are unresolved issues concerning its solution. The increase in conflict makes the problem solving process more complex.

Type 3 problems engender a high level of conflict among the stakeholders. In this instance, there is no agreement on the problem or its solution. Consider this example. You live in a rural community. It faces water shortages, an influx of wealthy people from surrounding urban areas who are buying up housing and available land for second

homes, pressure from developers who want to put in more golf courses, and complaints from a growing number of community members who drive longer and longer distances to find affordable housing and jobs. What is 'the problem'? Is it affordable housing, a lack of jobs, an underdeveloped public transportation system, too much growth, or not the 'right' kind of growth, degradation of the environment, or population growth rates? Attempts to address 'the problem' accomplish little. Political and resource constraints force constant re-definitions of the problem and its solutions as interested parties come and go and community preferences shift. Officials launch efforts to conserve water one year only to abandon them the next as short-term weather patterns change and political will evaporates. Housing surfaces as an important issue only to be replaced by jobs during the next election cycle when the economy takes a downturn. The problem solving process is further complicated because stakeholders in a democratic society have the power to block initiatives not of their liking through lawsuits, judicial reviews, and the time-honored tradition of throwing the 'rascals' out of office. Nothing really bounds the problem solving process – it is experienced as ambiguous, fluid, complex, political, and frustrating as hell. In short, it is wicked.

We have a long history with wicked problems, although our awareness of them only began to take shape in the 1960s and 1970s (Churchman, 1967; Rittel and Webber, 1973). Alerts have come from specialists in many quarters – product designers, software engineers, planners, and policy makers (DeGrace and Stahl, 1990; Guindon, 1990; Verma, 1998). These experts voice warnings that traditional linear methods of problem solving (e.g. specify the problem, gather and analyze data, formulate a solution, implement solution) do not seem to be working, especially for a certain class of problems. What is worse, there appears to be no apparent alternative in sight.

We can speculate on the recognition and rise of wicked problems at this point in time. Perhaps the expansion of democracy, market economies, privatization, travel and social exchanges highlight value differences and thus promote dissensus rather than consensus in the problem solving process. Perhaps the technological and information revolutions enable more people to become active participants in problem solving, and in so doing, increase the complexity of the process. Perhaps the ideological shifts in policy and management that encourage organizational decentralization, experimentation, flexibility, and innovation weaken traditional authority and control mechanisms that heretofore have keep a lid on conflicts. Whatever the source of wicked problems, there is little doubt that public managers and officials need immediate help in dealing with them.

The purpose of this article is to explore various strategies public officials and managers can employ to cope with wicked problems. Section One examines what I believe to be three generic coping strategies: authoritative, competitive, and collaborative. I briefly describe each strategy and summarize its advantages and disadvantages. The model from which these strategies derive is based on the level of conflict present in the problem solving process, the distribution of power among stakeholders, and the degree to which power is contested.
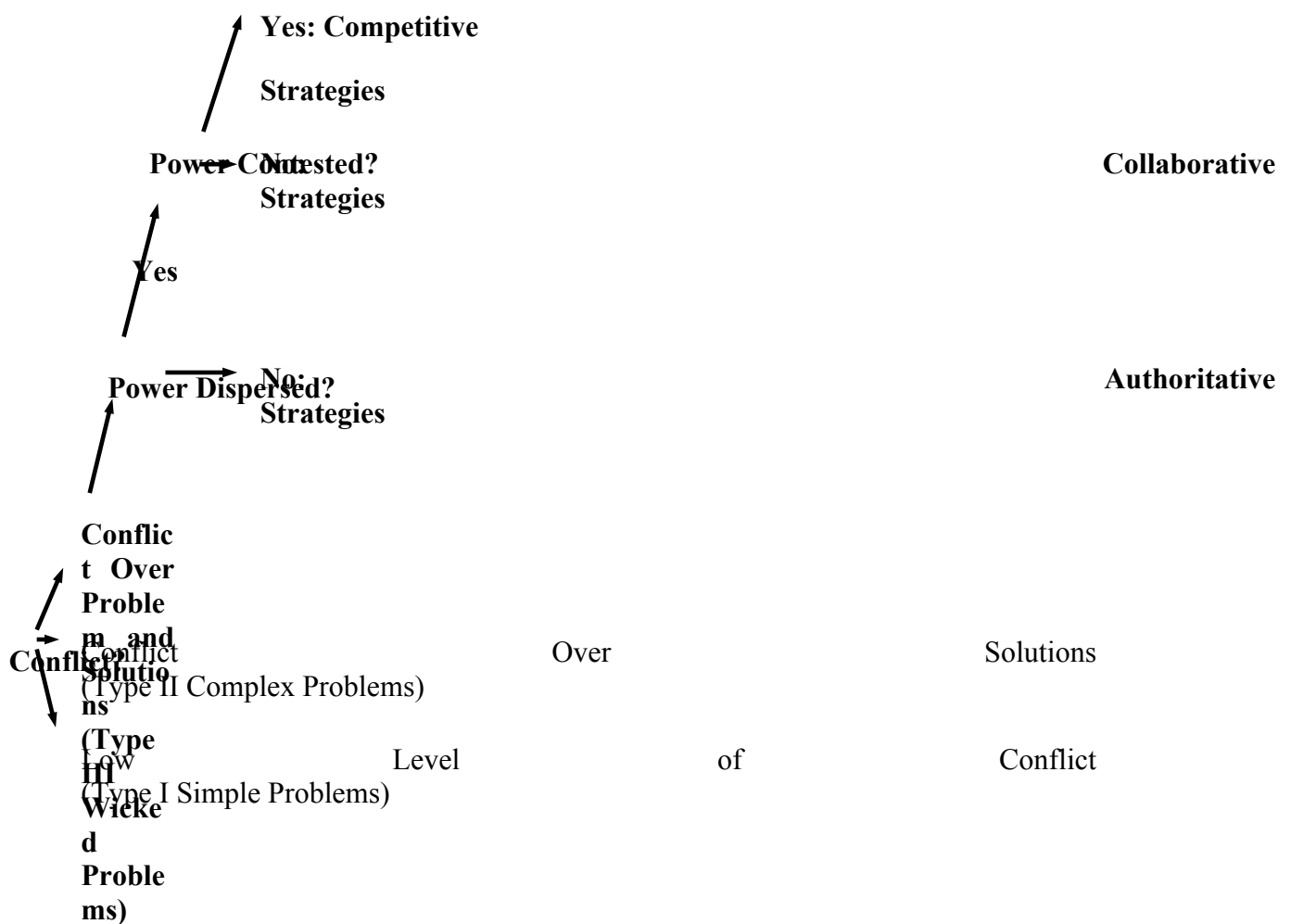
Collaborative strategies provide the focus for the remainder of the article. A case on the relief and recovery efforts in Afghanistan illustrates the challenges of pursuing a collaborative strategy to cope with wicked problems. Numerous 'lessons learned' emerge from the experience. The article concludes with implications for using

collaborative strategies to deal with wicked problems in crisis countries and other developing regions around the world.

Coping Strategies

Coping strategies to deal with wicked problems derive from the basic model in Figure 1. Three questions prompt strategy selection. On the far left-hand side, we ask how much conflict is present in the problem solving process. If there is a low level of conflict, then we have a simple or Type 1 problem. If conflict exists over solutions, then we face a complex or Type 2 problem. If there is conflict over the problem definition and its solution, then we confront a wicked or Type 3 problem (see Figure 1).

Figure 1:Coping Strategies to Deal with Wicked Problems

Yes: Competitive

Strategies

Power Contested? No: **Collaborative**
Strategies

Yes

Power Dispersed? No: **Authoritative**
Strategies

Conflict Over Problem and Solutions (Type III Wicked Problems)

Conflict Conflict Over   Solutions
(Type II Complex Problems)

Low Level of Conflict
(Type I Simple Problems)

Following the path for wicked problems, we then ask how power is dispersed among the stakeholders. If power is concentrated in the hands of a small number of stakeholders, then authoritative strategies can be employed to identify the problem and its solution. If power among the stakeholders is dispersed, we proceed to a third question. Is power contested among the diverse set of stakeholders, meaning is there a struggle for power that characterizes their interactions? If power is dispersed and contested, then

competitive strategies can be employed. If power is dispersed but not contested, then collaborative strategies can be utilized. Thus, we find three generic strategies for coping with wicked problems. Let us explore each in greater detail.

Authoritative Strategies

Authoritative strategies are 'taming strategies.' They diminish the level of conflict inherent in wicked problems by putting problem solving into the hands of a few stakeholders who have the authority to define a problem and come up with a solution. Identification of this small set of stakeholders may rest on their knowledge and expertise, organizational position in the hierarchy, information, or coercive power etc. But whatever the basis for selection, other stakeholders acquiesce in the transfer of power to the 'anointed' few and agree to abide by their decisions. Thus, when an organization is engulfed in disputes over performance and future strategy, a CEO can use the power of her position to step in and decide what path the organization will pursue. When the U.S. Congress is unable to decide on what military bases to close, it forms a committee and gives it broad authority to operate and make recommendations on base closures. When disputes arise over reproductive rights, U.S citizens rely on the power of the Supreme Court to establish the definition of life. When economic indicators are confusing and difficult to interpret, the U.S. turns to a Federal Reserve Board to establish monetary policy and set interest rates. Authoritative strategies, in essence, give the problem to someone or some group, who takes on the problem solving process while others agree to abide by their decisions.

Authoritative strategies have their advantages in coping with wicked problems. Reducing the numbers of stakeholders decreases the complexity of the problem solving process. If a large number of people are in on 'the action,' it is hard to get anything done. Problem solving can be quicker and less contentious with fewer people involved. It is on this basis that we elect representatives to govern us rather than resort to a direct democracy and we keep some residual command and control structures in organizations even when we are flattening hierarchies. Reliance on experts also can make problem solving more 'professional' and 'objective,' especially when specialization provides them with knowledge and sophisticated problem solving tools that laymen do not posses. Taking time to update non-experts who do not understand the 'finer points' of complex issues and who are not familiar with expert procedures 'wastes' valuable time and resources. Sometimes it is more important for authorities to get on with the work they have the knowledge and skills to deal with; that is why they were given the jobs in the first place, or so the argument goes.

Yet reliance on an authoritative strategy to cope with wicked has its disadvantages. First and foremost, authorities and experts can be wrong – wrong about the problem and wrong about the solution. Executives at GM only saw mostly American cars in parking lots and freeways in the early 1970s and concluded they had little foreign competition to worry about. Nuclear power plants are not as safe or as cheap a source of energy as the experts originally thought. 'Failsafe' procedures did not keep Three Mile Island and Chernoble open and skyrocketing insurance and development costs in the United States made nuclear energy less competitive compared to other sources of energy. Unanswered questions about nuclear waste still haunt us – questions that breed their own series of wicked problems. Setting aside disagreements among experts in a particular problem domain, experts tend to search for solutions within their narrow bandwidth of

experience, potentially missing other important issues and considerations. Analysts at the Environmental Protection Agency (EPA) developed a model to calculate the probability of deaths due to arsenic emissions from the ASARCO plant in Tacoma, Washington (Scott, 1990). Not only was the model incorrect, as members of the community later pointed out, because it was based on erroneous assumptions about the terrain, but other factors, such as lost jobs opportunities and their consequences were not addressed. For the EPA, the limited definition of the problem and its solution made sense. Its mandate and experience centers on environmental protection not jobs and community development. On the other hand, community members, struggling with tradeoffs between a plant closure and deaths from arsenic emissions, had more than environmental concerns to consider. They faced competing definitions of the problem that included pollution issues, economic issues, and political issues. A closely related disadvantage is the lost opportunity for learning. If problem solving is left to experts, especially in a democratic society, then citizens can become further and further distanced from the important issues of their time. A democracy rests on an informed citizenry and it is not clear how authoritative strategies keep them informed and engaged in the governing process (Reich, 1990).

Competitive Strategies

Competitive strategies have a long history. Whether they have been played out on the battlefield, in politics or in the market, stakeholders following this strategy assume a 'zero-sum game.' If my opponents win the right to define the problem and choose the solution, then I lose. If I win the right, my opponents lose. A win-lose mind-set thus permeates interactions. Warfare provides an extreme example of zero-sum competition when countries claim the right to define their wicked problems and their solutions (over religion, land, trade policy, etc.) in such a way that it threatens other countries. In the 1930s, Japan's need for oil and its expansion into the Pacific were considered to be a direct threat to U.S. interests. U.S. attempts to limit this expansion were viewed as a direct threat to Japan's national security. Each country's insistence on dealing with its wicked problems in its own way resulted in war.

Central to the pursuit of competitive strategies to deal with wicked problems is the search for power. To the extent a competitor can build a power base larger than his opponents, using whatever tactics his ethics and morality permit, he can increase his chances to win and define the problem and solutions in a way he sees fit. Power, after all, is the ability to get what one wants against resistance (Pfeffer, 1992). When a player wins out over the competition and can sustain those wins over time, then power is concentrated in his hands. Concentration of power, as noted earlier, enables him to resort to authoritative strategies instead of dissipating his resources in the competitive fray. Admiral Hyram Rickover serves as a good example in this regard. Developing his expertise over a number of years and surviving competition among the technical experts, he established control over nuclear technology and positioned himself as the authority in both civilian and military sectors in the U.S. His base of power was so great that few dared to question his authority (Lewis, 1980). Thus, over time, he was able to 'tame' his wicked problem by moving from competitive to authoritative strategies.

The advantages of competitive strategies to solve wicked problems are numerous. In the case of the market economy, industry competition prompts the search for new ideas. The energy sector offers a recent example. Companies have developed a new hydrogen

fuel cell technology that is touted to be a cleaner, less polluting replacement for other forms of energy. What has appeared to be an intractable issue, (environmental degradation that results from using oil and gasoline), may in fact have found resolution through the invention of this technology. Without competition among the providers of energy, it is unlikely that this new technology would have been developed. One also finds advantages in the political economy. When no clear consensus emerges in a democratic system on the definition of a problem or its solution, and competition among the stakeholders is great, why should a decision be made? Without a clear path, it is preferable not to go forward in any one direction – an assumption built into the U.S. constitution and its 'shared power' system of governance. Competitive strategies also have an advantage in that they challenge the institutionalization of power. Keep power circulating among the competition, so the argument goes (Pfeffer, 1992). One day you win, the next day I win, so in total, neither of us is able to centralize and institutionalize his power. Power is not corrupting; it is the concentration and institutionalization of power that is dangerous (Pfeffer, 1992).

Yet there are disadvantages to competitive strategies. Pushed to their extreme, they can provoke violence and warfare as noted above. The scars from competition in Northern Ireland, the Middle East, and Rwanda run very deep and continue to render the social fabric. Competition also consumes resources that could be spent on problem solving. The Port of Oakland in northern California learned this lesson the hard way when stakeholders battled for years over plans to dredge the harbor to accommodate new container ships that draw 30 to 40 feet. The costs associated with the procedural delays and attempts to resolve the dispute (litigation, regulatory and judicial review, etc.) were enormous (Kagan, 1991). The Port of Los Angeles in southern California benefited from the deadlock by building a multi-agency, multi-city political forum to cooperate on their port expansion plans and by absorbing the business that the Port of Oakland could not accommodate. The stalemates and gridlock that occur when stakeholders have enough power to block one another but not enough power to get something done keeps important things from getting accomplished. The continuing closure of the Oakland freeway due to earthquake damage and stakeholders' inability to agree on how to repair it is one such example. The delays have been estimated at $23 million per year in extra transportation expenses and fuel (Pfeffer, 1992). The indecision in mobilizing political support and getting agreement among the many stakeholders to fight AIDS is another example. It cost thousands their lives (Shilts, 1987).

Collaborative Strategies

Collaborative strategies are prompting a great deal of interest judging by the increasing references to them in the literature (Bardach, 1998; Chrislip and Larson, 1994; Gray, 1989; Huxham, 1996; McLagan and Nel, 1995). Deriving meaning from the French verb *collaborer,* translated as *working together*, collaboration is premised on the principle that by joining forces parties can accomplish more as a collective than they can achieve by acting as independent agents. At the core of collaboration is a 'win-win' view of problem solving. Rather than play a 'zero-sum game' that seeks to distribute 'pie shares' based on winners and losers, they assume a 'variable sum game' that seeks to 'enlarge the pie' for all parties involved. Alliances, partnerships, and joint ventures are all variations of the theme as they find expression in government, business, and international relations.

Advantages of collaboration are numerous and evident in the following examples. Members of research consortia share the costs and benefits of developing very expensive technology rather than carrying the full risks on their own (Doz and Hamel, 1998). Military alliances add strength in numbers and share the burden of their mutual defense. Even competitors of the same product line find virtue in working together to deliver better products and services to their customers (Doz and Hamel, 1998). Redundancies are eliminated and organizational efficiencies achieved when organizations outsource tasks and functions that enable both the organization and its supplier to add value by concentrating on what they do best (Quinn, et. al., 1996).

Disadvantages of collaboration also are well known. Adding stakeholders to any problem solving effort increases 'transaction costs.' There are more meetings, more people with whom to communicate and get agreement – interactions that can take a great deal of effort. Sorting out which operating procedures and whose norms of conduct will prevail takes time. As the number of stakeholders grows, so does the difficulty of achieving synergy. Skills of collaboration are limited, too, especially among people who work in a traditional bureaucracy with a strong hierarchy that limits participation and team-based approaches to problem solving and decision making. Collaboration requires practice; it is a learned skill. If members do not have these skills, they need to acquire them and that takes additional time and resources. Then in the worst case, collaboration can end poorly. Dialogue can turn into debate and debate into protracted conflict with little to show for the hours of preparation and meetings. Positions can harden making agreement even more difficult to attain in the future. There are no guarantees that the outcomes of collaboration will be satisfactory to everyone.

Collaboration für Relief and Recovery in Afghanistan

The challenges of using a collaborative strategy to cope with wicked problems can be illustrated in the following case concerning relief and recovery efforts in Afghanistan. The case begins in 1997 when the United Nations determined that it needed to find new ways to help countries in crisis. Aware that previous efforts had had limited success, some members of the UN community saw the potential for taking a more collaborative stance with the groups, organizations, and nations that wanted to be involved in helping the country rebuild.

Afghanistan has been wracked by war and the consequences of competitive strategies for over two decades. Some 50,000 combatants from a population estimated to be well over 20 million are actively engaged in fighting. The country lacks a legitimate government with control over its whole territory. Following the Soviet Union's withdrawal in 1989, there was a sense that the Afghan conflict would move towards resolution. This has not happened. The instability continues marked by the absence of functioning entities of governance. The crisis in Afghanistan has two facets: the absence of peace and security and the destruction of its civil infrastructure.

The country's human development indicators continue to erode. The long years of economic collapse have not halted population growth. Two decades of minimal education opportunities have seriously eroded the human capital base. Scarce employment, a decline in real wages, and the absence of formal banking structures characterize the economy. The formal economy has been criminalized with the

production of over 2,500 tons of poppies annually. Afghan farmers have been drawn into poppy production due to the lack of alternatives. Large refugee populations, fluctuating numbers of internally displaced persons, and conscription of young men into fighting forces have reduced the potential workforce and placed pressure on family economies. Morbidity and mortality remain higher than before the war. Preventable diseases claim an increasing number of lives. Basic sanitation and health care are absent from most parts of the country. Human capital is depleted and the prolonged absence of a uniform and extensive system of primary and secondary education holds serious implications for the future. Gender discrimination is severe and widespread in the territory controlled by the Talliban. In health, education, and mine clearance, international assistance plays a key, if not a predominate role.

International Assistance

International assistance suffers from a number of constraints. Stakeholders are numerous and consist of international non-governmental organizations (NGOs), United Nations' field agencies and staffs from headquarters, and bilateral and multi-lateral donors. All work independently and all suffer from declining funds. There is no institutional infrastructure, inter-organizational network, or authority to coordinate their activities. Direct interaction among the stakeholders is therefore difficult, limiting the development of an authoritative strategy to guide relief and development work. Stakeholders have strong value and political conflicts over both ends and means. Some insist, for example, that relief and development should be predicated on the Talliban's change of gender policy, an unlikely event. Other stakeholders argue that without international aid, the condition of women in Afghanistan will continue to deteriorate.

As a "country in crisis," Afghanistan does not allow for 'normal development' interventions on the part of the international community. Crisis countries lack a state structure and legitimate channels for representation and empowerment of their populations. Due to the absence of representative and regional and national authorities and weakened local authorities, international entities often take on exceptional responsibilities when they intervene. Intervening unilaterally, they begin to assume ownership of projects and programs that 'belong' to them. They end up deciding what needs to be done and where, and in so doing, serve as surrogates for governmental authorities.

As a consequence of this intervention pattern, a multiplicity of assistance agencies spring up and operate independently of one another. The agencies follow different mandates, rely on multiple sources of funding each with its own constraints, and engage in similar work without acknowledgment of the significant duplication that occurs among them or its consequences. Their interventions usually result in uncoordinated relief and development activities within the country.

This picture is further complicated by little coordination between the international political actors and their relief and development partners. The peace process concentrates primarily on the search for an end to hostilities and negotiating disarmament and other related agreements between warring parties. The web of contacts and the knowledge about the countries in crisis acquired by relief and development partners are not systematically utilized in informing the political strategy. There tends to be little substantive discussion of political developments and the continued threats to

human suffering, the functioning of the economy and the continuing search for opportunities to support recovery.

The challenge of coordination among international partners in a fragmented state without the basic institutions of governance, especially when surrogate government functions need to be performed is "formidable." Current arrangements – "coordination by consensus" – when the United Nations coordinator acts as advocate and facilitator, have been clearly ineffective. According to an Inter-Agency Mission Report on Afghanistan, the international attempts to alleviate the human distress and suffering have been plagued by "…unclear objectives, doubts and fears about impact and effectiveness…inefficiencies, lack of economies of scale, a multiplicity of agencies and duplication…." It concludes that the "…disparate collection of assistance institutions" has yet to form, "…a community with shared principles, complementary purposes and common goals," to which all can subscribe (Inter-Agency Mission Report, 1997).

Intervention for Collaboration

Aware that UN efforts have not always been effective in the past, the United Nations Undersecretary General for Political Affairs, the focal point for peace-building in crisis countries, offered an alternative to 'business as usual.' The idea was to create an inter-agency mission charged with the responsibility of building a strategic framework for the relief and development efforts in a crisis country. The strategic framework was to set out principles, policies, and recommendations that all of the international partners would use to guide their relief and development interventions. The UN's Committee of Agencies (ICC) was to oversee the initiative and select a "crisis country" that would serve as the first pilot. The ICC selected Afghanistan.

The strategic framework was to be a common vision and a broad consensus on what the aid collective intended to achieve. It also was to contain mechanisms for ensuring continuing negotiations and consultations between and among all external stakeholders, and increasingly, their Afghan counterparts when hostilities ceased. Not only was it to be an instrument for international partners to reassess and reconfigure their collective efforts, but ideally it would enable the political and security strategy and the emerging humanitarian, economic and development strategy to inform, and be informed by each other. The hope was that all stakeholders would stand to benefit from the systematic sharing of knowledge, information and perspectives that affect both domestic and political environments in Afghanistan. Coping with the intractable, wicked problems in Afghanistan called for a strategy of collaboration.

The mission team selected to work on the Afghanistan project included UN staff from the Department of Political Affairs, Department of Human Affairs, United Nations Development Program, and participants from the World Bank, UNESCWA, OXFAM, and the United Nations Staff College. The UN coordinator for Afghanistan assigned three consultants to the mission and the manager of the World Bank's resident mission in Islamabad assigned two staff members. In addition, a four-person UN Staff College team assisted the mission in conducting a workshop that was to be a focal point in the collaborative process.

The mission team leader, a veteran of the UN system, planned a series of steps that would build momentum for the overall collaborative effort. Activities included team

building, planning and site visits to Afghanistan prior to the workshop for members of the mission team; a workshop in Afghanistan for all of the stakeholders; post-workshop visits throughout Afghanistan to confer with local leaders and agencies; mission team development of the strategic framework; validation of the strategic framework at the policy level in New York; and finally, implementation of the framework at the field level in Afghanistan by the original workshop members.

Reality Intervenes

Preparations for the stakeholder collaboration were complicated by a number of factors. The ICC's choice of Afghanistan was delayed and planning efforts at the policy level were put on hold due to the continuing war in Afghanistan. The original idea had been to select a pilot country where hostilities had ceased. But eager to get the project underway, anticipating that the war would be over soon, advocates recommended going forward in Afghanistan. Interest had been generated and commitments had been made to various agencies and contractors who were supporting the mission. A short window of opportunity remained when mission team members would be available. The mission team leader himself had plans to finalize his commitments to the UN within the year.

By the time the UN made its official decision to launch the pilot in Afghanistan, there was little time to follow through with the original design of the overall collaborative effort. The mission-team leader, embarking on an innovative project never before attempted within the UN system, had to spend most of his time building political support and approval for the overall collaborative effort at the policy level. That left him little time to concentrate on mission design, management and implementation. On paper the overall collaborative effort appeared workable, but in reality there were some serious flaws. Overall project management and integration were minimal. Anticipated mission-team country visits, organizing, planning, and team building meetings did not occur. Coordination was limited among the agencies and individuals involved. People were scattered throughout the world -- in the field throughout Afghanistan and Islamabad, Pakistan, at the UN Staff College in Turin, Italy, at the UN headquarters in New York, and throughout the United States. As a consequence, roles among the mission team members were never clarified nor were members able to meet face-to-face until a few days before the workshop was due to begin. Some members did not arrive until the workshop was well underway.

The workshop itself had to be moved outside of Afghanistan to Islamabad, Pakistan to ensure participants' safety. Given the uncertainty surrounding the workshop, the designer/facilitator was unable to do much prior planning. She had little control over the arrangements: when and where the workshop would occur; the number and type of stakeholders who would attend; participants' advance preparation; clerical support during the workshop; and follow-up after the workshop. Workshop attendees were reluctant participants, at least initially. They had not received explanations, instructions, or invitations about the workshop until the week before the workshop was scheduled to begin. Travel was difficult for many, especially those who had to be evacuated from northern Afghanistan where the fighting had intensified. And key people were missing; the UN resident coordinator and some UN agency heads had prior commitments and other pressing duties. Their absence prompted some to question whether the whole effort would be worthwhile.

Workshop Process and Outcomes

Despite the start-up difficulties, more than 80 people appeared at the opening of the workshop. Members came from various UN agencies, bilateral and multi-lateral donor countries, Afghan and international NGOs and the Red Cross Movement. Working through a loosely designed set of activities asking people to assess their environment and the state of their inter-organizational relationships, participants identified some 247 strategic issues that were of concern. Grouping the issues into 25 basic categories, they identified 14 major issues on which they wanted to focus their work. Small groups then developed strategies and actions plans for each issue (Bryson, 1995).

Participants were self-managed when workshop activities required them to break into smaller groups. Each group identified its own discussion leader, timekeeper, recorder, and reporter (and members were encouraged to rotate these roles). The large group and the sub groups made decisions based on consensus. The one exception was the exercise that required participants to rank strategic issues in order of their personal priorities. Participants and the facilitator established ground rules for the event. Interaction was to be open and equal with no one group or organization dominating. Everything was to be recorded on flip charts and people were to listen, be considerate and mutually respectful of one another and not to make speeches. Scheduled times were to be observed. Participants were to seek common ground rather than dwell on their differences, self manage their small groups, and keep comments off the record and not for attribution.

After the workshop concluded, the mission team began the next phase of the overall effort. Its charge was to write a strategic framework, based on workshop input, to guide future relief and recovery efforts. Here is where collaboration faltered. Mission team members, uncertain of their roles and responsibilities, could not agree on what to do or how to proceed. Tension intensified when they were unable to decide what a framework was or should be. Hoping to break the impasse, they created sub groups, each one taking topics on which the members were expert. The mission leader then was to take the lead in pulling the subgroup reports together in order to prepare the final document. Drafts were to be circulated for final mission-team approval. The document went through many late-night revisions both in the two-week aftermath of the workshop in-country and the following months when the mission leader returned to the U.S. Observers described its writing as a painful process to watch and members described it as an equally difficult process in which to participate. Upon last report, policy makers had yet to meet and approve the mission-team document.

Despite the breakdowns in the handoffs between the workshop and the mission team strategic framework, between the strategic framework and its approval at the policy level, there were some impressive outcomes at the field level in Afghanistan. Stakeholders continued to meet throughout the next year both at the regional and national levels. New relationships among the donors and relief and development partners were forged. The NGOs, who previously had not been part of inter-agency interactions, still retained their 'voice' and were involved in the programming exercises. Stakeholders came to agreement on a number of changes: the establishment of the Afghanistan programming board consisting of NGOs, UN personnel and donors. The programming board was to oversee five regional areas and its defacto chair would be the UN Resident Representative. A common mechanism for coordination was developed on a regional basis. Regional stakeholders would meet to develop a coherent

program, decide on criteria for selection of programs, and set priorities to fund only those activities that supported the common effort. At last report, they had agreed to a joint monitoring mechanism, in principle, the details of which they expected to work out by the end of the year. According to a UN headquarters staff member, "the workshop provided the raw material for a consensus …and gave legitimacy to what came afterwards." The "analysis on the ground" helped policy makers recognize that the political strategy and the relief and development strategy had to be linked.

Implications from the Case

The UN-sponsored events surrounding relief and development in Afghanistan offer valuable lessons and insights to those who would use collaborative strategies to deal with wicked problems, especially in crisis countries. I have singled out four that merit particular attention.

Fail into Collaboration

Nobody of whom I am aware came to the Afghanistan project believing that previous efforts at relief and development in crisis countries had been very successful. In fact, when I asked what prompted their interest, many poignantly spoke of failures they had witnessed first hand. As experienced members of bureaucracies, large and small, they also were very familiar with what I have termed authoritative and competitive strategies for dealing with wicked problems, and they were well acquainted with their disadvantages. So despite their fatigue and skepticism, and the pull from the field to deal with emergencies, they came to the workshop willing to give collaboration a try. They were in search of a better way of doing things.

It is my firm conviction that people have to fail into collaboration. Experiences with authoritative and competitive strategies and personal knowledge of their disadvantages are great teachers. People have to learn what does not work before they are willing to absorb what they perceive to be the extra 'costs' associated with collaboration. This learning is especially important for people who come from cultures that place a high premium on taking charge, making decisions, being competitive, and using authorities and experts to settle whatever disputes arise. Only when people come to realize the shortcomings of competition and handing over decisions to authorities, are they willing to experiment with collaboration as an alternative way of coping with wicked problems.

Beware of Attempts to Tame Wicked Problems

Despite the start-up difficulties in getting the innovative project off the ground, once underway, the workshop enabled stakeholders from field activities in Afghanistan to identify some common ground and focus on issues of joint interest. Unfortunately, the next step in the collaborative effort – the handoff to the mission team did not go smoothly. The subject matter experts on the mission team had a great deal of difficulty in pulling together the materials and writing a strategic framework. That difficulty, in my view, was to be expected.

The mission team was composed of a wide-ranging set of experts -- political scientists, economists, historians, managers, and businessmen. Not only did their educational and

work experiences condition them to see the world differently, but their organizational affiliations predisposed them to have very different definitions of 'the problems' and 'the solutions' in Afghanistan, not unlike the participants of the workshop. But instead of attempting to work out these differences as full participants in the collaborative effort and learning from one another, they remained on the sidelines as observers. Some did not even attend the workshop. They assumed that as experts, they would be able to take whatever was generated from the workshop, and in a short period of time, turn it into a strategic framework, reconciling the major conflicts that had been years in the making. In essence, they fully believed it was possible to use an authoritative strategy to tame wicked problems (strategic framework written by experts) and overlay it on a collaborative strategy used by the stakeholders in the workshop.

As noted, authoritative strategies can be employed to tame wicked problems to the extent that power is concentrated and uncontested among the players. Neither condition obtained in this case. Multiple centers of power were represented at the workshop and within the mission team. The UN convened the events, but there was no one, overarching authority that all of the stakeholders deferred to or that was powerful enough to 'force a decision' on the other players. Competition among the participating groups and agencies, if activated, could be keen. They had been known to act in ways to guard their turf and independence, especially surrounding resource and policy decisions. With power dispersed among the players, and with no agreement to hand over the wicked problems of relief and recovery to anyone, including mission team leadership, an authoritative strategy was unlikely to be effective in this instance.

"Get the Whole System in the Room"

Wicked problems and their solutions are socially defined. People have to construct their meaning. The trouble with social definitions is that they vary because people's personal preferences, backgrounds, educational experiences, and organizational affiliations vary and predispose them to see the world in different ways. We all have become specialists of one kind or another. Our diverse interests and perspectives become a curse when each stakeholder believes it holds 'the truth' and expects everyone to share it, or worse, when a stakeholder wants to impose his view of truth on others and considers anyone who refuses to accept it as dumb, ignorant, or morally deficient. We end up talking past one another instead of having a "dialogue" with one another (Bohm, 1990).

One way to move people beyond their 'my truth is better than your truth' positions is to get "the whole system in the room" so stakeholders can begin to learn from one another (Bunker and Alban, 1997). What they can learn in working together is that each holds 'some truth' in dealing with wicked problems. By asking what they are hearing from others that can help them better understand the problem and its solution, they can begin to appreciate their differences and view them as an opportunity to learn more about the problem and its potential solutions. Appreciative inquiry is built on this basic premise. (Barrett, 1995; Cooperrider and Srivastva, 1987)

Getting the "whole system in the room" has its challenges, however. Figuring out what the system is, who the stakeholders are and how to select them, how many can be accommodated under one roof, what the agenda will be, and how to facilitate interactions all have been mentioned elsewhere as major issues to consider (Emery and

Purser, 1996; Jacobs, 1994; Weisbord, 1992; Weisbord and Janoff, 1995). Here I want to identify some issues that were particularly salient in the Afghanistan case.

Stakeholders, especially under crisis conditions, can be impatient and want to get on with things so that they can get back to their 'real work.' It helps to begin by explaining that the real work in dealing with wicked problems is learning together, not learning as independent entities. This type of learning takes time; patience is required of themselves and of others. Scaling down expectations under these circumstances is advisable. Rather than jumping immediately into what-is-the-problem-and-how-are-we-going-to-solve-it exercises, building opportunities for stakeholders to talk about themselves and their issues of concern can be time well spent. The real challenge is to help them begin to build a community of interest where none existed before. The fact that the stakeholders continued to meet after the workshop and developed a mechanism to ensure an ongoing dialogue about relief and development in Afghanistan speaks volumes in this regard. Once people saw the value of getting "the whole system" together, they figured out a way to keep it going so they could build on their earlier experiences.

Dealing with wicked problems requires a delicate balance. There are very real differences that separate stakeholders and ignoring them does not make their differences disappear. On other hand, it is difficult to begin a learning process if all stakeholders do is argue about what divides them rather than focus on what unites them. What this means in practice is that there may be some areas surrounding wicked problems that are just too difficult for a group to tackle, at least formally, and at least initially. Time may be better spent in finding areas of common ground on which they can take some collective action and feel good about what they have accomplished (Weisbord, 1992; Weisbord and Janoff, 1995). The debate over gender policy in Afghanistan illustrates the point. Instead of a heated debate on the issue of gender that threatened to divide the stakeholders and disrupt the proceedings, workshop participants took the issue of gender policy "offline." Interested parties met after hours at lunch or in the evening to discuss gender issues, while workshop activities continued to search for issues on which they could work together. Getting the whole system in the room does not mean everyone will or has to agree, but it does mean that they have to find some areas of common interest, or there will be nothing on which they can collaborate to become a learning community.

Be Open to Self-Organization and Co-Evolution

The stakeholders operating in Afghanistan worked in an "under-organized" system (Brown, 1980). Few formal or informal mechanisms existed to legitimate their meeting as a group to exchange ideas and learn from one another. Complicating the picture was an inability to organize due to the crisis conditions and the difficulty of bringing together people from all over the world. In contrast to standard approaches for activities such as these that recommend months of pre intervention planning and preparation (Emery and Purser, 1996; Jacobs, 1994; Weisbord, 1992; Weisbord and Janoff, 1995), the workshop was a "come as you are event" without certainty of what would happen and how. Organizers guessed that somewhere between 30 to 40 people would attend. Well over 80 appeared on the first day.

By necessity, this meant that the workshop became a self-organizing system: it was open to and structured by naturally occurring interactions and activities (Jantsch, 1980).

It literally developed on a moment-by-moment basis. People appeared and things began to happen. True, the designer/facilitator established guidelines for interactions that were agreed to by all participants (e.g., stakeholders in the workshop were co-equal members with the same rights to participate, contribute, and set direction). And the group created constraints to regulate their interactions (e.g., self-organizing small groups; no speeches; no cell phones, no smoking in common areas). But the designer/facilitator literally "made it up" as the intervention unfolded. Based on her assessment of where the group was and what it needed, she would open each day with suggestions on how to proceed, drawing on her background in planning for large groups. The workshop members were free to go forward with her ideas or opt for others that made more sense to them. As a consequence of the open-ended nature of the interactions, participants created a "complex adaptive system" – one that developed its own rules of behavior, reflected on its behavior, and self-directed its interactions based on what it was learning (Stacey, 1996). By necessity, the designer/facilitator's role had to highly flexible and adaptive – a role that constantly co-evolved in relationship to participants' needs and understandings. She was under no illusion that she or any one else was 'in control' of what was happening during the workshop. The actions of a given moment just fed into and gave direction to subsequent activities; they were not, nor could they be under the circumstances, predetermined by any particular design.

Others have written on our need to find new patterns of leadership (Block, 1993; Chrislip and Larson, 1994; Daft and Lengel, 1998; Wheatly, 1994), new ways of managing and organizing

(Jantsch, 1980; Kiel, 1994; Prigogine and Stengers, 1984) and new ways of thinking and behaving (Senge, 1990; Stacey, 1992; 1996) to deal with conditions similar to the Afghanistan case. These and other references provide valuable suggestions on how to function, create, and learn under conditions of high uncertainty and ambiguity. In addition to their insights, I would offer, as the workshop's designer and facilitator, a few remaining observations of my own.

Essential to any undertaking, especially in crisis conditions, is the ability to "trust the process" and the group's ability to monitor its own progress and make self corrections along the way. Many things would be nice to have in large-group interventions: a mission and vision that sets direction; participants well trained in group skills; leaders who can galvanize energy for collective action; time for planning and preparation. But under crisis conditions, it is unlikely that all or even some of these elements will be present. In my view, it is better to just get on with it rather than wait until everything is in place, an unlikely occurrence anyway given the circumstances. What really matters in a situation like this is each person's willingness to make a 'leap of faith' that commits him or her to working together, acting with integrity, and trusting that somehow something will come out of the collective effort without any guarantees that it will. What all this amounts to is less heroics, more humility, and a greater appreciation for experimentation, 'groping along,' and 'muddling through' than we normally permit ourselves given the weight of our rational analytic tool kit and strategic management practice. It really is an act of courage on everyone's part that starts the effort. We should not underestimate how difficult and important it is to acknowledge and take this first step.

Conclusions

Wicked problems will be with us for some time, deriving as they do from the interdependencies and complexities of living together without a shared set of values and views. One alternative is to develop better coping strategies. Three strategies have been outlined with the greatest attention paid to collaborative strategies, the least understood and practiced of the three. A stakeholder collaboration concerning the relief and recovery efforts in Afghanistan served as an example of how wicked problems can be approached, even under crisis conditions, when power is widely distributed among the stakeholders. Although the collaborative effort surrounding Afghanistan has its unique attributes, there are some important 'lessons learned' that can be applied to other regions torn by conflict and in search of better ways to approach relief and development work.

We learn to take care in attempting to tame wicked problems by turning them over to experts or some center of power for definition and solution. If we are truly dealing with wicked problems when no one is "in control," then it is unlikely that the experts and leaders will be able be able to act unilaterally to define the problems and their solutions. In fact, their insistence in doing so may impede the problem solving process. We learn that wicked problems are socially defined so that getting the "whole system in the room" to enable people to learn from one another is very useful. And given the constraints and complexity of crisis situations, social learning is more likely to be successful if it remains a self-organizing, complex adaptive system that co-evolves as stakeholders meet, interact, and inform one another's actions. Ultimately, we learn that to lead, facilitate and participate in such collective undertakings requires an act of faith. It begins with the hope that there is a better way of doing things, a recognition that failure is possible, and a willingness to 'trust the process' without guarantees of a particular outcome. It is sustained on personal reserves that enable people to remain calm and centered in the face of the unknown and the unknowable. These are important lessons for all of us to learn.

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