Adapting to the Adaptive: 
How Can We Teach Negotiation for Wicked Problems?

*Jayne Seminare Docherty & Leonard Lira*

Editors’ Note: This chapter picks up where the “wicked problems team” left off in Venturing Beyond the Classroom: with the need to formulate effective teaching strategies for an exceptionally important area of inquiry, in which our understanding is, as yet, far short of perfection. Docherty and Lira are examples of professionals whose students cannot wait for anything close to perfection: both in peacebuilding and in the military, a professional must work with the understanding that is available. It is significant that in their very different environments, Docherty and Lira have been learning from each other, adapting ideas from the military into peacebuilding and vice versa, in order to formulate teaching programs that can work even within the single perspective of either discipline. Their experiments are groundbreaking, and of importance to many other professional fields.

Introduction
In prior writings in this series (Chrustie et al. 2010; Honeyman and Coben 2010; Docherty 2010; Lira 2010), we and our colleagues in the “wicked problems team” explored the nature of wicked or adaptive

*Jayne Seminare Docherty* is a professor at the Center for Justice and Peacebuilding at Eastern Mennonite University in Harrisonburg, Virginia. Her first book Learning Lessons from Waco was an analysis of the Federal Bureau of Investigation’s attempt at hostage negotiation with the Branch Davidian sect, and her subsequent work has frequently involved the intersection and relationships between uniformed forces and civil society, ethnic minorities, and religious groups. Her email address is jayne.docherty@gmail.com. *Leonard Lira* is a Lieutenant Colonel in the U.S. Army and an assistant professor in the Department of Joint, Interagency, and Multinational Operations of the Command and General Staff College at Fort Leavenworth, Kansas. His email address is leonard.lira@us.army.mil.
problems and the challenges of using negotiation to deal with such problems. We drew the concepts from two different sources, which use different terms, as part of our attempts to understand our experiences working in complex conflict situations. We will use wicked and adaptive interchangeably. We will also discuss an important recent book by Peter Coleman and his colleagues (2011; see also Playing the Percentages in Wicked Problems, chapter 20 in this volume), which uses concepts from chaos and complexity theory to explain intractable conflicts better; these we consider to be one form of a wicked or adaptive problem.

Because the subject matter may be unfamiliar to the reader, we will begin with a degree of recapitulation of the team’s 2010 writings. Readers already familiar with this material may wish to skip to page 387. For the purposes of this chapter, the term “wicked” describes problems that exhibit some combination of the following features:

- The problem is ill-defined and resists clear definition as a technical issue, because wicked problems are also social, political, and moral in nature. Each proposed definition of the problem implies a particular kind of solution, and one that is loaded with contested values. Consequently, merely defining the problem can incite passionate conflict.
- Solutions to a wicked problem cannot be labeled good or bad; they can only be considered better or worse, good enough or not good enough. Whether a solution is good enough depends on the values and judgment of each of the parties, who will inevitably assess the problem and its potential solutions from their respective positions within the social context of the problem.
- Every wicked problem is unique and novel, because even if the technical elements appear similar from one situation to another, the social, political, and moral features are context-specific.
- A wicked problem contains an interconnected web of sub-problems; every proposed solution to part or the whole of the wicked problem will affect other problems in the web. (See generally Rittel and Webber 1973; Ritchey 2005-2008; and Conklin 2005.) This stands in sharp contrast to the nature of problems that the planning profession has labeled “tame.” As summarized by Tom Ritchey (2005-2008: 1), a tame problem:
  - Has a relatively well-defined and stable problem statement.
  - Has a definite stopping point, i.e., we know when a solution is reached.
  - Has a solution that can be objectively evaluated as being right or wrong.
- Belongs to a class of similar problems that can be solved in a similar manner.
- Has solutions that can be tried and abandoned.

The concept of an adaptive problem as contrasted with a technical problem is taken from the work of Robert Kegan and Lisa Laskow Lahey (2009). As Kegan and Lahey (2009: 31) have learned through extensive practice, “meeting adaptive challenges requires first an adaptive formulation of the problem (i.e., we need to see exactly how the challenge comes up against the current limits of our own mental complexity), and, second, an adaptive solution (i.e., we ourselves need to adapt in some way).” Technical problems, while they may be very complicated, do not require that we grapple with naming a new problem clearly and make changes in ourselves in order to deal with them.

This is a significant observation, and therefore worth expanding upon. It is a misunderstanding of wicked problems to think they can be tamed by getting the parties to recognize and accept objective information. To illustrate, some of our colleagues asked whether construction contracts for a massive project such as the Big Dig in Boston would constitute a wicked or adaptive problem. They argued that the Big Dig was ill-structured and wicked but became quite tame as the parties learned the requirements for solving the problems they were facing. In response, we offer that if the parties simply needed to gather more information or improve the way they shared information to solve their problem, then it was a difficult technical problem, rather than “wicked.” Technical problems can be very complicated; but their complexity is typically diminished through gathering more or better information, or improving shared access to information.

Some problems are both technically complex and wicked: reducing the emissions of greenhouse gases is an example. The development of the necessary technology is complex. But the creation of socio-political, legal and economic systems that will support the development and deployment of such new technologies is definitely a wicked problem, some would say it is a “super wicked” (Levin et al. 2007; Lazarus 2009). In fact, it is an example of the kinds of large-scale systems change problems that we argue require a different understanding of negotiation.

Perhaps negotiation as currently taught and practiced rests on an unconsciously held mental model of conflict as a technical problem. This would help to explain why adaptive or wicked problems have been so little discussed in the arena of negotiation and teaching negotiation, even though parts of the field of conflict resolution have been deeply preoccupied with wicked problems in the form of intractable conflicts.
According to Douglas Noll (2001), an attorney writing on mediate.com, adaptive problems do not fit into the framework of mediation, and we think his claims can also be applied to negotiation. In his words:

If people recognize the problem and can repeat a well-worked solution, then normal mediation processes are efficient. For example, lawyers who have experience negotiating the settlement of automobile accidents are engaging in technical work. The mediator simply acts as an honest broker to facilitate the distributive negotiation. **There is no adaptive problem because no views, values, behaviors, or assumptions need to be changed.**

In situations that call for adaptive work, however, the parties must **learn their way forward**. This is the work of peace-making, not generic mediation. Even when a peacemaker has some clear ideas about what needs to be done, implementing change often requires serious and substantial adjustments in people’s lives. (Emphasis added)

We read Noll’s list of sample adaptive problems – “adaptive problems typically involve partnership disputes, turf wars within large organizations, family business conflicts, employment conflicts (harassment and discrimination), marital dissolutions and other relationship or identity conflicts” – as further validation of our claim that such problems are not limited to the unstable and violent contexts where we work. (See the stories by Howard Gadlin and Jamil Mahuad, in particular, in this team’s prior effort, Chrustie et al. 2010.)

We presume Noll is talking about problem-focused mediation rather than transformative mediation (Bush and Folger 1994); at least his example of mediating accident claims seems to be framed in a problem-focused manner. Readers who advocate for transformative mediation have likely already balked at Noll’s observations. We urge them not to disengage from our argument on this basis. While we see transformative mediation as one effort to include personal and relational change in the mediation process, in our view it misses the mark for grappling with complex wicked problems. Transformative mediation focuses on personal and relational transformation without discussing how such transformations actually alter the problem at hand.³

In a similar vein, we pondered whether Noll’s idea of “learning their way forward” applied only to alterations in the parties’ subjective views and attitudes rather than alterations in their understanding of objective variables. We concluded that this is not actually a helpful
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question, for the same reason that Bush and Folger’s transformative mediation model misses the mark. *The concept of a wicked problem rests on a view of the world that claims there is no neat and clear distinction between so-called objective variables and our so-called subjective understanding of them.* Or, to put it differently, wicked problems coalesce around our socially negotiated collective answers to five worldviewing – yes worldviewing a verb, not worldview a noun – questions:

- What is real?
- How is what we consider real organized?
- What is valuable (not valuable) about what we deem real?
- What constitutes authentic knowledge?
- What should we do? (Docherty 2001: 52)

In that respect, wicked or adaptive problems are deeply structured by the *meaning-making processes* that the parties employ to organize the world and respond to it in ways they deem effective and proper.

**Our Context: Our Work**

In our work, the wicked problems we deal with are also called intractable conflicts. Until the publication of Coleman’s (2011) book *The Five Percent: Finding Solutions to Seemingly Impossible Conflicts*, most researchers focused on finding the root source or essence of intractable conflicts. By Coleman’s count, the literature identifies fifty-seven (!) root causes of intractable conflicts. Coleman and his colleagues took an adaptive approach to intractable conflicts when they shifted the focus from finding the cause to seeing intractable conflicts as a system.

As soon as one looks more deeply into the collection of fifty-seven factors, which are each the source of intractability, it becomes clear that there is something even more basic that intractable conflicts seem to share. These essences, all fifty-seven of them, are often connected to one another in a very particular way. They tend to be linked in such a way that they support and reinforce one another. In other words, they function like a system: one complicated, well-oiled system. That is their essence (Coleman 2011: 35).

Once this idea is written down, it is difficult not to say, “Well, of course! Intractable conflicts are systems and they require a systems approach! Perhaps our episodic- or encounter-focused mediation and negotiation practices can’t deal with the whole system!”

But it took Coleman and his colleagues at the International Project on Conflict and Complexity fifteen years of conducting research and gathering evidence in order to develop a robust new view of the intractable conflict problem. In this work, they were assisted by peacebuild-
ing practitioners who have been tackling conflicts as complex systems – without the benefit of an adequately negotiated language for talking about conflict systems – for at least thirty years. And their new explanation, their adaptive way of looking at intractable conflicts, will probably flourish because it will be used by peacebuilding practitioners and by educators in peacebuilding programs, such as the one at Eastern Mennonite University’s Center for Justice and Peacebuilding, where Jayne divides her time between teaching and practice.

It is worth noting that Coleman’s book was developed, in his own words, by “a motley crew: an unlikely mix of social psychologists, an anthropologist, an astrophysicist, complexity scientists, conflict specialists, and peacemakers” (Coleman 2011: xi). In other words, to even conceive of a new way of thinking about the problems presented by intractable conflicts, the world of academia had to break with some of its own established practices, including the propensity to work in disciplinary silos, the attitude that true knowledge comes from pure research which should then be used to inform practice, and a tendency to force faculty members to choose between “pure” and “applied” research. Wicked or adaptive problems do indeed require that we change ourselves – as practitioners, researchers, educators, and students – if we want to address them effectively.

The next evident problem to be addressed is how those who have developed ways of working with such problems through trial-and-error practice and those who have conducted research that helps explain such problems can effectively teach others to employ various skills, including negotiation, when they encounter wicked or adaptive problems. Perhaps just as important, how do we teach them about the limitations of negotiation, and about ways to effectively integrate negotiation activities with other processes when dealing with such problems? Here, we return our attention to the primary focus of the Rethinking Negotiation Teaching project.

Our audience, we presume, will include both practitioners and teachers. In our view, teachers who want to address these problems need first to immerse themselves in the practice of working with them. Fortunately, these sorts of problems are not that uncommon. While Coleman’s group is focused primarily on the five percent of conflicts that have become sustained and violent, and while both Gadlin and Mahuad (Chrustie et al. 2010) have engaged in what might be called rather elevated levels of practice, Noll (2001), correctly in our view, points out that the same dynamics are applicable in conflicts very close to home and easily accessible to many practitioners and teachers.

Practitioners, in our experience, improve their practice when they attempt to teach others what they have figured out in practice.
Bridging this practice/teaching divide is probably as important for rethinking negotiation teaching as was bridging all of the academic/practice divides in order to more accurately describe and explain the dynamics that create Coleman’s five-percent problems, or what we have been calling wicked or adaptive problems. Therefore, this chapter and the next two will tack back and forth between discussions of negotiation practice and of the practice of teaching negotiation.

We (the authors) also comprise a motley and unlikely, albeit small, crew. Leonard is a U.S. Army officer approaching negotiation from the field of military arts and science. Jayne is a professor in a peacebuilding program. In addition to teaching negotiation, we both have field experience using negotiation to address complex problems in situations that are unstable. Leonard served two tours in Iraq, including a tour where his primary focus was providing security and reconstruction for Taji, a district in the northern part of the Baghdad province. His unit’s two main tasks were to train the Iraqi security forces (police and army) and to assist the local government in “standing up” and operating. Jayne works in Lebanon, Thailand, and Myanmar (Burma), where she teaches and coaches local parties working incrementally and nonviolently to move their societies toward more just, sustainable, and inclusive patterns of social, political, and economic governance.

We have both learned about the limitations of what is typically taught in a negotiation class or training when the context is unstable, the problems are ill defined, the legitimacy of the negotiators is unclear, and the parties have entered Coleman’s “landscapes with very strong and coherent attractors for destructive interactions and weaker, less coherent, latent attractors for more constructive types of interactions” (2011: 85). In earlier papers (Docherty 2010; Lira 2010) we used the concept of wicked problems that originated in the field of design and planning (Rittel and Webber 1973) and more recently entered the arena of military sciences (Greenwood and Hammes 2009) as a framework for exploring the disconnect between what we were taught about negotiation and the realities we faced on the ground. We also used the concept of adaptive problems (Kegan and Lahey 2009), which we appreciated because it emphasizes the need for self-reflection and a willingness to change oneself in order to deal with the problem at hand. Our colleague, Calvin Chrustie, who has long experience as a crisis negotiator with the Royal Canadian Mounted Police and as a U.N. peacekeeper, agreed with our ideas about the nature of the problems we were confronting. And Gadlin and Mahuad, who work in less chaotic and less potentially violent settings, agreed with us that wicked problems are more common than is typically acknowl-
edged in the teaching of negotiation (Chrustie et al. 2010). At the conference in Beijing, other project participants, largely those teaching in the field of public policy, supported this view.8

Now we are working in our respective domains on ways to teach others how to use negotiation in situations similar to the ones we encountered. Jayne actually has two sets of students – university students in a graduate program, and leaders in Lebanon, Thailand, and Myanmar (Burma). Leonard’s students are primarily U.S. nationals, with a few international students from allied countries in the mix, while Jayne’s students at the university come from around the world and, of course, her students in other countries are from cultures other than Jayne’s home culture.

Most of Leonard’s students are mid-career military officers from the United States and allied countries, but his classes also include students from other federal government agencies, such as the departments of State, Justice, Agriculture, and Labor. Jayne’s university students range from entry-level to mid-career members of a variety of different professions, including development, education, policing, post-conflict reconstruction and recovery, community organizing, politics, and government. In the field, her “students” are a mix of high-ranking decision-makers and lower-ranking individuals who will be working as staff for political and military leaders of armed groups and newly elected officials in transitional governments.

Leonard’s students will most likely be working in situations where they are using negotiation while also conducting or authorizing the use of kinetic operations.9 Some of Jayne’s university students will work in the same arenas where Leonard’s students operate, but without the capacity to apply – and often with a deep skepticism about the value of – kinetic operations.10 Some will work in situations where the presence of forces willing and able to use policing force in support of security and stability for the general populace – rather than in support of warlords or powerful groups working on their own behalf – would be a welcome change from the prevailing chaos. Other students will never see direct violence; instead, they will be working to alter conditions of structural violence11 that leave entire communities in the grip of poverty and truncated life opportunities. These students are dealing directly with deep-rooted, intractable conflicts and with the consequences of structural violence in their own communities and countries.

In spite of these differences, the contexts in which our students work are similar. In those settings, governance systems12 are typically absent, non-functional, or considered illegitimate by significant parties. Alternatively, there may be competing governance systems vy-
ing for legitimacy. Violence – overt or structural – or the threat of violence is a given. The patterns of interaction among the parties are dominated by what Coleman calls negative attractors “made up of many elements from feelings and beliefs to group rules for conflict to national holidays and institutions. These elements are tightly linked through reinforcing feedback loops that intensify and spread the negativity and pull of the conflict over time. Additionally, they possess a set of loops that provides inhibiting feedback, which discourages or prohibits de-escalation or other changes in more constructive directions” (2011: 85). The problems to be addressed usually meet most or all of the criteria for being deemed wicked or adaptive, and many are part of Coleman’s five percent (the most intractable conflicts).

In addition to facing similar problems, we are now using the same framework to design our courses. Leonard introduced Jayne to David Kolb’s “Experiential Learning Model” (ELM), which is widely used at the Army Command and Staff College (see Appendix below for a detailed explanation of ELM).

Jayne was already using participatory teaching processes that elicit the experience and knowledge of the students, but she started using the Kolb model to improve the design of all of her courses and workshops. At this point, Jayne has used ELM and insights about negotiating wicked problems to improve her workshops and the training materials developed in those workshops. At the university, she has used ELM to modify courses that include small elements of negotiation teaching, and she recently designed and taught a course (Narrative Negotiation) that focuses on negotiating wicked or adaptive problems. Her course is described in Teaching Three-Dimensional Negotiation, chapter 19 of this volume.

Leonard uses the ELM, somewhat modified from Kolb’s theory, in all of the courses he teaches (see Appendix). In his electives, he tries to expand this model to establish a “reflective practicum” method. This method requires his students to work their way through complex problems by conducting sub-group exploration of as many variables of the problem as they can, consolidated group synthesis of those variables, and then group evaluation of the variables from their selected wicked problem, to develop a course of action to engage the problem. Leonard’s reflective teaching method will be detailed in Making it up as You Go, chapter 18 of this volume.

Based on these experiences, we considered writing a prescriptive paper about how to teach negotiation for wicked problems; it was, in other words, tempting to put up another “product” to compare with the training and education programs we wanted to critique. However, doing so would run counter to one of the biggest lessons from our field experience: context matters!
If context matters in the field, then it also matters in the classroom where we are preparing negotiators for the field. It matters who our students are, and it matters where they will be working in the future. This is not just a plea for the development of more complex and field-relevant exercises or cases. Wicked, or adaptive, problems require the development of negotiators with high levels of self-awareness and a willingness to engage in self-change in order to deal with the problem. Negotiators for wicked problems also need to develop a significant capacity for critical and creative thinking about how to support positive changes in the socio-political-economic context within which they are operating.

For these reasons, we think readers will benefit more if we show the process by which we developed our courses, as well as the description of the courses. This will reveal where we have similar and divergent ideas about the theories behind negotiating wicked or adaptive problems. It will also help others, who are preparing negotiators for different contexts, to think about how they would design context-appropriate courses and trainings.

In this chapter, we lay out our shared thinking about the ways that negotiating in the context of wicked problems differs from negotiating problems that are more common. Or rather, to be consistent with our own paradigm, we lay out our current version of our socially negotiated understanding of the ways that negotiating in the context of wicked problems differs from negotiating more common problems. Then we identify suggested goals of negotiation teaching when preparing students to deal with wicked problems. We also explain the ELM method of teaching and some general guidelines for using it to design negotiation courses or training. Finally, we challenge the idea that negotiators can be prepared to deal with wicked problems using only classroom or training room activities. In our view, there is a need for further field-based reflective practicum activities in order to prepare highly skilled negotiators capable of dealing with wicked problems. In the next two chapters (Making it up as You Go and Teaching Three-Dimensional Negotiation) we respectively describe in greater detail the courses we have developed or are developing to teach our respective students.

A New Framework for Thinking About Negotiation for Wicked Problems

In conflict situations, wicked problems frequently but not always take the form of long-term, intractable conflicts that are typically a multi-dimensional mix of issues only some of which can be addressed through the
transitional negotiation processes currently emphasized in courses and short trainings (Avruch 2006). As Robert Ricigliano (2006: 56) observes:

... it is not that the existing negotiation canon is invalid, but that needs and values cannot, for the most part, be satisfied at the transactional level alone. Rather, values and need-based conflicts are often addressed through the interplay over time of progress at the transactional level (e.g., specific negotiated outcomes) with changes that occur at the contextual level. ... Conflicts that involve issues of identity, fundamental values, and/or basic human needs require consideration of two critical contextual elements: structures and social relations between groups in society. Structures refer to the systems and institutions in society that are designed to meet people’s basic human needs for identity, security, vitality, and community. These systems and institutions include governance, security, rule of law/human rights, social services (education, health-care), environmental/natural resources, and media and civil society. Social relations refers to the state of relations between groups in the society, be they based on ethnicity, race, religion, class, clan, etc. It refers to the levels of trust between groups, the lever of inter-group tensions, inter-group perceptions, and the various dynamic interactions between groups (e.g., victim-oppressor, relative deprivation, etc.). Often the deeper roots of protracted conflicts are in the contextual dimension (emphasis added).

We would agree with Ricigliano, but we would add that it is a mistake to use the concept of “negotiation” to refer only to transactional (or direct dispute-settlement) activities. We believe that the mental model that dominates negotiation teaching makes it difficult to consider wicked or adaptive problems precisely because the term negotiation is reserved solely for transactional negotiation. It is more helpful to understand transactional negotiations as problem-focused processes that are, themselves, a consequence of social negotiations. Parties enter into transactional negotiation through a process of negotiating the following: What is (and is not) a problem suitable for transactional negotiation (Docherty 2001); how to define (or frame) the problem to be negotiated (Caton Campbell and Docherty 2006); the site (dispute domain) in which to negotiate (Miller and Dingwall 2006); which parties have a right to enter into the negotiation process, and how the participants should conduct themselves (what scripts they may or may not use) during negotiation (Stolte, Fine, and Cook 2001). In
stable settings, these things may have long since been more-or-less settled, so that the social negotiation is not on most people’s minds. In our settings, they are very much “live” issues.

Before proceeding further, we should explain the conceptual foundations of our multi-dimensional model of negotiation. We are reflective practitioners at heart. Our primary concern is effective practice. Consequently, we start with a multi-faceted problem derived from the field. How can negotiation as we currently understand and teach it be used to:

- Help communities and societies deal with problems of violence and instability,
- Help communities and societies move from oppressive systems of governance to more inclusive systems of governance, and
- Help negotiators deal with wicked or adaptive problems more generally?

We have already seen that parties can only deal with wicked or adaptive problems if they change: a) their mental maps of the problem; and b) their understanding of what their future will be like as a result of making the first change. This might be something as relatively non-threatening as altering ideas about construction to accommodate a planetary reality of permafrost. But it might be something as threatening to identity, values, and privilege as altering ideas about their roles, status, and future living arrangements with other individuals or groups.

We (the authors) have been most involved in conflict situations where whole groups of people must engage in processes of social transformation in order to deal with their shared problems. In other words, multiple groups need to shift their collective consciousness so that their reality is refined by consensus (for a quick overview, see http://en.wikipedia.org/wiki/Social_transformation.) Or to put it another way, in the situations where we are working, human communities need to grapple with their usually unspoken and unexamined answers to the five worldviewing questions listed above.

The answers to those questions are found not in formal treatises or doctrines, or at least not only in such documents; they are found primarily in the lived answers to questions such as:

- How should men and women interact?
- How should elders and youth relate to one another?
- How should material resources be allocated among diverse communities?
- What is the proper way to “tell the story of our people”?
- What constitutes the good life?
What kind of evidence is considered valid and reliable when we make truth claims?
Who gets to participate in collective decision-making and how is collective decision-making done properly?

Even though some aspects of some of these questions (and thousands of other questions like them) can be crafted into problems amenable to transactional negotiation, there is no way to convene a bargaining process to answer these types of questions directly. The answers are lived into, through a variety of processes of communication that we are calling social negotiations.

To make sense of our practical questions and our concept of social negotiation, we need to lodge them in a paradigm that fits the questions, a way of understanding the world in which a concept of social negotiation even makes sense. Following Gareth Morgan (1980) and our own experience in practice, we assume multiple paradigms can and do exist simultaneously within disciplines of study and practice. From a top level (alternate realities) perspective, we are clearly operating from a paradigm that focuses on the ways that people individually and in groups construct their world, including their personal lives, their shared lives, and their societies. There are many schools
of thought in psychology (see, e.g., Burr 1995; Parker 1998; Gergen 2009) and sociology (see, e.g., Goffman 1959; Berger and Luckman 1966; Giddens 1979) that fall under this broad paradigm. Theory and research in this paradigm focus on the same problem: How do humans, in society, create their worlds and themselves? It is no accident that our teaching methodology is grounded in the social constructivist learning theories of Lev Vygotsky (1978: 1986) and the transformative pedagogy of Paolo Freire (2009).

Social constructionists have their internal (intra-paradigm) squabbles about whether the real focus should be on small group interaction, or on the interactions between individuals or primary groups and larger social structures. We would say: Both are important; we want to know how micro (individual) level, meso (group) level, and macro (social) level changes can be coordinated to have peace writ large (Anderson and Olson 2003) effects. Social constructionists argue about whether individuals are constrained or empowered by the structures in which they interact. From our experience, we would say: Both, and the really interesting question is how people use their opportunities to alter the pattern of constraints and empowerment for themselves and others. Social constructionists debate whether the engine of change is primarily human agency or environmental forces. We would say: Some of each, and the interesting question for a practitioner is whether we put our energy toward empowering the agents or shaping the environment to promote the desired changes.

It should be obvious by now that we are pragmatists. As such, we prefer to start our conversation at the middle level of metaphor rather than the top level of paradigm. According to Morgan (1998), who proposed seven metaphors for organizations, “all organization and management theory and practice is based on images, or metaphors, that lead us to understand situations in powerful yet partial ways” (1998: 358). Morgan identifies the following metaphors for organizations: machine, organism, brain, culture, political system, psychic prison, process, and system of domination. Similar metaphors are found in sociological research and in other forms of practice including our own fields of the military arts and peacebuilding. Each metaphor is interesting and partially accurate, but more important; each metaphor is useful in its own way (See Gadlin, Schneider, and Honeyman 2006). Morgan argues that an effective leader learns to use multiple metaphors “to ‘read’ and understand what is happening in an organization” (Morgan 1998: 251). We would make the same claim for anyone working with conflict and with parties in a conflict.

When facing a wicked problem or an intractable conflict we find it most helpful to use the metaphor of society as an emergent system. The word emergent is going to show up a lot in these chapters.
Sometimes we use it to describe an unfolding and unpredictable process of change. But when we say society is an emergent system, we are using technical language from the study of chaos and complexity theory, sometimes known as the study of self-organizing, adaptive systems. We are applying that technical language to society in a metaphorical manner to illuminate aspects of society that need attention in order to deal with an adaptive problem.

The basic building blocks of a self-organizing, adaptive system are agents, schema, and simple rules. Agents in an emergent system can be anything, as long as they are able to follow simple rules and make “choices” based on information coming from their environment. Some examples of agents in emergent systems are: insects, slime mold, birds, fish, or human beings (individually or in groups). Simple rules guide the choices of the agents and “schema are mental templates that define how reality is interpreted and what are appropriate responses for ... given stimuli” (Dooley 1996: 3) – in other words, which rules to apply in this case. Birds in flocks or fish in schools might have the following rules: stay close together, but not too close, move toward food, and flee from predators. The resulting emergent systems are flocks of birds or schools of fish that swoop through the sky or the water as if they have a shared mind.

The big difference between insects, slime mold, fish or birds and human beings, is the fact that “man is the symbol-using (symbol-making, symbol-misusing) animal” (Burke 1966: 16). Burke goes on to say man [sic] is the “inventor of the negative (or moralized by the negative), separated from his natural condition by instruments of his own making, goaded by the spirit of hierarchy (or moved by the sense of order), and rotten with perfection” (1966: 16). In other words, human emergent systems differ from the emergent systems of fish, birds and slime mold because human beings are capable of making value-based choices – and engaging in values-based disagreements – about what is good or right.

The central point we are making here is this: Human beings are active, creative participants who construct their social world, not passive, conforming objects of socialization. Individually and in groups, they have the ability to accept, challenge, and/or renegotiate the rules and roles that are sustained by cultural norms, organizations, and institutions. In emergent terms, they can renegotiate the schema or mental templates and the rules by which they operate and the purpose or goal of the larger system. This renegotiation can be a messy process, but it is often so gradual as to escape notice. During both positive periods of rapid change (e.g., moving from war to peace) and negative periods of such change (e.g., dealing with the consequences of a
massive natural disaster), however, the problem of social negotiation rises to our attention.

In this way, our metaphor of society as an emergent system plus our observations of what happens to those emergent systems during times of turmoil leads us to a multi-dimensional understanding of negotiation that we posit is a more accurate description of the breadth and depth of negotiation as a lived social reality. Social negotiation is used, consciously or not, continuously to constitute and sustain or modify the context, including dispute domains and the rules and roles that guide participants in a transactional negotiation. Dispute domain negotiation is used to frame specific problems and locate them in a particular socio-cultural setting where they can be negotiated using (culturally shaped) transactional negotiation processes.

Figure 2 reminds us to consider all three interlocking types of negotiation. Problems become wicked, in part, because the three types of negotiation become disconnected from each other. This happens when the views, values, behaviors or assumptions about when, where and how to negotiate specific problems are no longer supported by a negotiated social order that enjoys adequate legitimacy, or when shared assumptions about what is negotiable or who is allowed to negotiate fall apart. Problems also arise when the results in one negotiation create negative feedback that entrenches rather than resolves conflict in another domain. The results of transactional negotiations sustain or modify the results of social negotiation, including the legitimacy (or lack thereof) of dispute domains. Social negotiations can create new dispute domains, delegitimize existing dispute domains and even overthrow or negate prior agreements achieved through transactional negotiation. Carefully selected transactional negotia-

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**Figure 2: Interconnected Types of Negotiation**
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tions can be used to alter the socially negotiated order in positive directions, but carelessly or malevolently chosen transactional negotiations can throw societies into turmoil.

Most negotiation courses or training focus in detail on transactional negotiation, perhaps focus marginally on dispute domain negotiation, and typically focus not at all on social negotiation. This limited focus may work just fine for some types of conflicts. Nevertheless, as we suggested above, many more cases than commonly thought may require simultaneous attention to the three types of negotiation. Certainly, the kinds of problems we (Leonard and Jayne) have dealt with in the field demanded a multi-dimensional approach to negotiation, and we are now trying to figure out how to teach others to take this approach. Following Ricigliano, we do not question the validity of the current canon of negotiation topics and practices, but we do question their adequacy for dealing with wicked problems.

One of the first things negotiators need to learn when dealing with wicked or adaptive problems is that the overall problem cannot and will not be altered only or perhaps even primarily through transactional negotiations. In the words of Ambassador John McDonald,

[t]here is no such thing as an ‘intractable’ conflict. To obtain positive results, the following are necessary ingredients at the government and citizen levels: building trust, demonstrating goodwill, deploying mutual peacebuilding skills, and having profound dedication to creating peace (2006:721).

As a pioneer with Louise Diamond of multi-track diplomacy (1996), Ambassador McDonald was one of the first to recognize that peace comes to a conflicted society not primarily from top-level peace negotiations, but from sustained multi-dimensional engagement of the entire society. Our concept of social negotiation builds on this multi-track tradition with an added emergent systems orientation to social structures and relationships, as constantly under negotiation through myriad formal and informal interactions. Social negotiations may improve relationships so that people can engage in dispute domain negotiations to identify or create legitimate arenas for dealing with the problems that have been identified by the people as most important for altering their social systems and relationships in directions they deem positive. Engaging consciously in this process is a good description of peacebuilding.

Ambassador McDonald adds that obtaining funds for this kind of work is the most difficult element. We would add, however, that coordinating other activities with transactional negotiations is another significant problem. Insofar as we inadvertently teach negotiators to ignore
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the relationship between transactional negotiation and social and dispute domain negotiations, our students and we (teachers of negotiation) may be part of the problem and not part of the solution in cases of complex conflict.

Here is a short list of some of the problems that we have seen when transactional negotiation is used inappropriately in relation to adaptive or wicked problems.

- The problem to be negotiated is poorly chosen; it is of interest only to a small group of parties or it is imposed by outside actors.
- The framing of the problem is not inclusive; any agreement reached will benefit some parties and harm others, thereby further exacerbating underlying social, political, or economic imbalances.
- The dispute domain being used is considered illegitimate by some parties or by their constituents; any agreement emerging from that domain will be considered illegitimate.
- The negotiators are disconnected from the people; everyone at the table is part of an elite segment of society with its own interests in maintaining a problematic status quo ante.

In short, transactional negotiations done poorly can make the overall problem far worse than it was before the negotiations. Other activities must be used prior to, in tandem with, and subsequent to negotiations if the transactional negotiations are going to have a positive effect on the larger problem (Docherty 2005: 2010). Negotiators do not need to be experts in all of the “tools” that are used to transform complex conflicts, but they do need to know that other tools exist; they need to be willing to learn in situ which tools are needed prior to, during, and after transactional negotiations; and they need to learn how to coordinate their activities with those of others working on the conflict (Brown et al. 2004).

Adaptive problems, by definition, require that the parties change themselves in order to deal with the problem. Because we are talking about complex social conflicts, the changing of self is, therefore, necessarily group change, not just personal changes by key players. This makes the relationship between at-the-table and behind-the-table negotiations more complicated than is usually understood. Jayne’s experience with armed resistance/liberation groups indicates that the “set of loops that provides inhibiting feedback, which discourages or prohibits de-escalation or other changes in more constructive directions” (Coleman 2011: 85) operate at the group level as well as the individual level. These loops are operationalized through organizational norms, procedures, and codes of silence that lock members into a “groupthink” that is impervious to available information that would
question established views, ideas, or policies. The high in-group bonding forged through years or even decades of struggle makes it difficult for individuals to challenge the established group norms, rules, and conflict strategies. Structural factors such as an inability to leave the territory controlled by the group and risk factors such as an inability to protect family members from possible reprisals from others in their own movement or organization perpetuate the larger conflict by obstructing reality-based thinking and creativity. Jayne has not worked directly with the government side of the conflict, but she has heard from colleagues working with those parties that the same dynamics are at play.

We are talking here about complex negotiations embedded inside complex negotiations, as each party adjusts its own sense of identity, purpose, goals, and (frequently) internal power dynamics and organizational structures. Within each party, there is usually an internal struggle between moderates, who want to negotiate, and hardliners who prefer competitive (even combative) strategies (see Honeyman 2006). In this context, a successful transactional negotiation about a carefully chosen smaller issue can be part of a confidence-building process that helps the moderates in all of the parties build constituencies strong enough to support bigger negotiations and resilient enough to endure the setbacks that are an inevitable part of dealing with a complex problem. In this situation, negotiators must become adept at analyzing the structural, cultural, and relational dimensions of the behind-the-table negotiations of all of the parties (see Caton Campbell and Docherty (2006) for a sample case, and Docherty and Caton Campbell (2006) for the behind-the-table negotiation issues related to that case).

Our proposed multi-dimensional framework for understanding negotiation necessarily links to a dynamic understanding of culture that goes well beyond the do’s and don’ts list that all too often gets used in negotiation training. We agree with Kevin Avruch (2004: 393) that trying

to learn about another culture from lists of traits and customs is akin to trying to learn English by memorizing the OED: all vocabulary, no grammar. This method is particularly ill suited if what one is trying to master in another culture is a dynamic process to begin with – a process such as negotiation.

We would take the culture problem a step further. There are no culturally neutral individuals who enter into another culture; negotiation is always a cultural encounter, and one’s own culture is always a part of the equation. (See, e.g., Goh, et al., As We See It and Stulberg,
Kwon, and McCormick, *How Different is “Different,”* chapters 5 and 6 in this volume.) Connecting the problem of culture to the necessity for self-change as part of dealing with adaptive problems, we have concluded that negotiators need to become symmetrical anthropologists (Docherty 2004) capable of observing culture (their own and others’) in action. This implies that we must teach negotiation in a manner that involves students in self-reflection, and not just the mastery of skills.

**Rethinking Negotiation Teaching Objectives and Methods**

Once we know what students need to learn, we can articulate the learning outcomes/objectives/goals (Gagne et al. 2004) for a course, for a workshop, or for a curriculum. We will say more in the next chapters about whether it is possible to use single courses or workshops to prepare negotiators for wicked or adaptive problems.

When teaching adult students, the goals need to be concrete, practical, and applicable to real problems recognized by the students. Broadly speaking, our goal is to educate negotiators capable of dealing with the kinds of problems we and others have encountered in the field. When we make that broad goal more concrete, we identify the following learning outcomes:

- Students will be able to transfer core negotiation skills (many of them taught in current negotiation courses or trainings) to new, complex, and evolving situations.
- Students will be able to think critically and creatively about the role and limitations of transactional negotiation as a tool for dealing with wicked problems.
  - They will be able to identify and prioritize transactional negotiable problems that will help alter the wicked or adaptive problem in positive directions.
  - They will be able to recognize elements of the problem that require other interventions that support a social renegotiation of relationships and structures.
  - They will be able to coordinate transactional and social negotiation activities.
  - They will be able to identify available dispute domains, articulate the strengths and weaknesses of each domain option, and make coherent choices about when, where, and how to negotiate specific issues that drive the larger conflict.
Students will be able to manage the ongoing information gathering and analysis processes necessary to negotiate effectively in a changing context.

Students will be able to manage the negotiation process while it is in progress, and they will be prepared to alter the negotiation process as necessary given changes in the broader context.

The first objective on the list above is a problem for all negotiation teachers, whether they are focused on wicked problems or not. According to Michael E. Roloff, Linda L. Putnam, and Lefki Anastasiou (2003: 823) few programs actually assess whether training increases participants’ knowledge or their ability to apply that knowledge to new situations. By transfer, we mean that a negotiator is able to take a concept or skill and apply the underlying principles of that concept or skill to an entirely new situation. The new situation may be related to the situation used in the classroom or training – in other words, it may be in the same general domain of practice – or it may be a situation quite different from the one used in teaching. To be classified as new it must be distinctive enough to test the ability of the negotiator to do two things. First, she must recognize patterns of difference and similarity, in order to make judgments about the applicability of the knowledge gained in the classroom to this situation. Then she must make adjustments in the application of the knowledge and skills to suit the new situation.

The ability to transfer negotiation knowledge to new situations is predicated on the critical and creative cognitive skills of the negotiator. Roger Fisher, William Ury, and Bruce Patton make this clear in their third step for Getting to Yes methodology. They indicate that negotiators need to “invent” options (Fisher, Ury, and Patton 1991: 56–80). However, they warn that the creative thinking required for this is stymied by “judging prematurely, searching for a single answer, assuming that the negotiators’ pie is fixed in supply, and leaving to the opponent the solution of his or her problems” (1991: 57). They offer four prescriptions to invent creative options: “separate the act of inventing options from the act of judging them; broaden the options on the table rather than look for a single answer; search for mutual gains; and invent ways of making their decisions easy” (1991: 60). Their prescription indicates that critical and creative thinking applied to negotiators’ skills is necessary to assess each new situation and develop the best creative course of action; therefore, it needs to be developed in the student and should be a desired outcome of any course on negotiation.
We have already discussed above why students need to be able to coordinate negotiation with other activities when dealing with a wicked problem. If one accepts the concept of wicked problems and the uniqueness of each situation as well as the argument that every action we take in relation to the problem alters the situation, then it is clear that negotiators need to master skills for continuous information gathering, assessment and adaptation of their negotiation strategy. (See Calvin Chrustie’s analysis, in *Playing the Percentages in Wicked Problems*, in this volume, of the Bosnian conflict of the 1990s.) Negotiators require the ability to formulate and adapt a negotiation strategy based on changes to the context of the situation in which they are using their skills. Given that the contexts in which negotiators practice their skills are imbued with human variables, causing an unpredictable reaction for every action taken, the negotiator needs to possess the ability to assess and modify negotiation strategies developed at the beginning of her intervention.

While the development of both transferable knowledge and conceptual problem solving abilities is necessary for successful negotiators, adaptive problems demand much more. Not only must a negotiator possess certain domain knowledge of negotiation skill application, and the ability to conceptualize solutions based on that domain knowledge, but she should also be able to manage the implementation of those solutions. She must develop the ability to apply judgment to negotiation situations that require decisions on the selection of a reasonable course of action. The inability to do so could lead to failed negotiations where all other variables would indicate that it should succeed (Neale and Bazerman 1985: 49).

Given these learning outcomes, we are designing courses that combine experiential and reflective methodologies. Most negotiation courses focus on the acquisition of skills rather than reflection on one’s own assumptions about negotiation. In other words, in our educational and practitioner experience, we have either received experiential (skills focused) or reflective training or education, but rarely both together. We think this gap needs to be closed to prepare negotiators to deal with wicked or adaptive problems.

In researching how to do this efficiently and effectively, we did not find much help in the educational research literature or negotiation’s academic literature. Consequently, we offer in the next two chapters examples of methods, both experiential and reflective, that we have adopted in teaching several courses where negotiation skills were being conveyed. Both of us believe that negotiation skills are central enough to our practice that they should be incorporated into other courses, and not taught only in specialized negotiation courses.
So some of the techniques we describe have been incorporated into other courses, while some are taught in a full negotiation course.

**Rethinking Negotiation Teaching through Experiential Learning Methods**

As a way of organizing the development of experiential teaching methods, we have both used an experiential method employed by the U.S. Army Command and General Staff College (CGSC). This method is adapted from David Kolb’s “Experiential Learning Model” (ELM) composed of five steps:

- Concrete experience;
- Publish and process;
- Generate new information;
- Develop; and
- Apply.

Kolb developed the ELM based on the work of the Russian cognitive theorist L.S. Vygotsky, who theorized, “learning from experience is the process whereby human development occurs” (Kolb 1983: xi). According to Kolb, learning is best stimulated by creating a “dialectic tension and conflict between the immediate concrete experience” and contemplation of the analytical theory that addresses the phenomena that the participating student is experiencing (1983: 9). To Kolb, this conflict between experience and theory was the “central dynamic in the process of experiential learning” (1983: 9–10).

The faculty and staff development division at the CGSC teach the faculty to employ Kolb’s ELM in their entire curriculum (U.S. Department of the Army 2008). As can be seen in the Appendix, the way in which CGSC operationalizes the model takes into account all possible learning styles, by having the lesson or course flow in a pattern that uses an approach from each of the learning modes.

Kolb identified essentially four different modes of learning, which exhibit four distinct abilities of students: concrete experience abilities, reflective observation abilities, abstract conceptualization abilities, and active experimentation abilities (1983: 30). The concrete experience ability is an orientation toward being involved in experiences and dealing with immediate human situations in a personal way. The operative skill in this ability is to feel, versus think; thus, it influences the affective domain of human knowledge. The reflective observation ability orients on understanding the meaning of ideas and situations through observation and describing them without bias. The emphasis is on observation of how events are occurring in the observed environment and developing an intuitive understanding, versus figuring out what is the exact action required to make events occur. The ab-
abstract conceptualization capability orients on using logic, ideas, and concepts to think through the issues, versus the use of feelings. This ability emphasizes theory building over intuitive understanding. The active experimentation ability orients on actively influencing the environment through practical application, to see what occurs, instead of passively reflecting on what is observable in order to gain an understanding (1983: 68–69).

It is important to note that while Kolb identifies these four learning modes as distinct, they do not necessarily exhibit themselves distinctly in individuals. In fact, individual students can exhibit a combination of each of these abilities in varying amounts. Kolb attempts to map this by utilizing a learning style inventory, developed to categorize how much of each learning mode an individual may exhibit (at the time of the inventory.) The inventory is presented as a multiple-choice instrument which, when graded, will list how much each of the capabilities listed above are exhibited in an individual. Depending on how this maps out for each individual, their basic learning style is identified and labeled. For example, if the individual student exhibits the preponderance of capabilities that are characterized as abstract conceptualization and active experimentation, Kolb labels their learning style as convergent. Convergent learners seek practical application of theory to experience in order to solve problems. They reason deductively and prefer technical tasks to interpersonal tasks, thus demonstrating control in the expression of their emotions.

If the individual student exhibits a preponderance of capabilities of concrete experience and reflective observation, Kolb labels this learning style as diverging. This learning style is the polar opposite of the converger. A divergent learner will intuitively notice relationship patterns. Divergers will look for multiple alternatives to understanding issues and solving problems by viewing concrete experiences through many perspectives. They tend to be imaginative and emotion-oriented.

If the student exhibits a preponderance of capabilities associated with concrete experience and active experimentation, then Kolb labels that individual learning style as an accommodating learning style. This style is characterized as learning best by doing things, adaptable to change, and impatient with waiting to intuitively solve a problem. Accommodators will learn by trial and error.

In polar opposite to this learning style is the student who demonstrates a preponderance of capabilities associated with abstract conceptualization and reflective observation. Kolb labels the student with those types of capabilities as an assimilator. Assimilators are comfortable with building theoretical models to understand issues and
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problems. They will reason inductively and are less concerned with humans or their emotions, and more focused on abstract ideas (see Figure 3 below).

Based on the identification of these learning styles, Kolb adopted his experiential learning model. Kolb based his learning model on two continua that form a quadrant out of combining the polar opposites, in the learning modes that create the learning styles:

![Figure 3: Kolb's Experiential Learning Model.](image)
Crucially, ELM *reverses the order of many negotiation courses*. Rather than providing input on a theory or idea (for example claiming value and creating value) and then putting the students into a role-play, game or simulated activity to practice applying the concept, we start with experience. The experience used in the classroom needs to be designed with enough complexity to engage the students, and it needs to be recognizable as an “authentic” field-based problem. This argues against the development of generic role-plays or games for teaching negotiation, and it argues for the development of rich, complex activities that are suited for particular groups of students. In chapters 18 and 19, we will describe in greater detail some strategies for creating powerful experiential activities for a variety of students without having to create the activities anew for each group.

There is no right or wrong answer during the experiential phase of ELM. The focus is on shared discovery. Cultivating an attitude of wonder and discovery during the experiential phase – what John Paul Lederach, Reina Neufeldt, and Hal Culbertson (2007) refer to as “remystifying practice” – is critically important. It sets up the basis for double-loop learning (Argyris and Schön 1978) or reflecting on our theories-in-use, which Chris Argyris and Donald Schön also call our “strategies for getting what we want.” Wonder and discovery allow the students to uncover their own attitudes, assumptions, beliefs and patterns of behavior – some of which they will need to “unlearn” in order to become better negotiators of wicked problems. (See Scott Peppet and Michael Moffitt (2006) for more on learning and unlearning in negotiation pedagogy.) Unlearning is a significant feature of reflective learning and professional development; we will have more to say about this in chapters 18 and 19.

Reflective learning continues during the “publish and process” phase when students and teachers step back from the experience and unpack what happened. Who did what in what order? Why did they do that? What does that mean for the way we are thinking about the problem at hand? What worked well? What did not work well? Where did we see disagreements about how to proceed? What do these disagreements reveal about assumptions and attitudes? How did our combined assumptions and attitudes promote or prevent successfully defining a negotiable problem, and locating a dispute domain in which we could negotiate?

Only after the students have experienced a challenging problem and discovered what they can from that problem does the instructor step in with new information. She adds ideas, theories and research that might shed new light on what just transpired during the experiential and publish/process phases. In this way, students are able to connect a concrete, lived experience to the new ideas.
Reversing the input of new ideas and experiential learning process is supported by the new brain research and the cognitive sciences. It is a concrete expression in the classroom of a paradigm shift that has led a growing number of researchers to

the conviction that the proper units of knowledge are primarily concrete, embodied, incorporated, lived; that knowledge is about situatedness; and that the uniqueness of knowledge, its historicity and context, is not a ‘noise’ concealing an abstract configuration in its true essence. The concrete is not a step toward something else: it is both where we are and how we get to where we will be (Varela 1999: 7).

Looking ahead to the students’ anticipated real-world situations, the group (students and instructor) contemplates what it would look like to apply the new learning in situ. Together they are able to anticipate and plan for the transfer of learning to real-world settings. We recommend that students have at least two and preferably three or more opportunities to work with complex cases. In each experience, they will adapt and apply what they have already learned to a new case and reflect on the process by which they achieved (or did not achieve) a transfer of learning from one experience to another. These subsequent classroom experiences are opportunities for the instructor to observe whether and how students are applying what they are learning. After that, the instructor can give each student detailed, direct feedback about where she needs to focus her personal development as a negotiator. Students can also give each other feedback, which cultivates attitudes and practices needed to work effectively on the teams that are a necessary feature of addressing wicked problems.

Conclusion

We have two primary conclusions, based on our experience as practitioners and educators. First, students of negotiation need to learn about the relationship between transactional negotiation and social and dispute domain negotiations. Failing to appreciate that relationship in cases of complex conflict may contribute to the social problems they intend to help solve. Second, using an experiential- and reflective-based method of teaching negotiation students about this relationship has been one way we as educators have tried to do this.

We both believe that the ELM approach to classroom teaching will yield negotiators who are better prepared to deal with wicked or adaptive problems. However, we do not think this is enough to achieve that goal. As a matter of principle as well as efficacy, we believe it is misleading to say that participants can learn what they need
to know to negotiate wicked problems in a single class or workshop. (See Crampton and Tsur, *Negotiation Stands Alone*, in this volume, as to some possible career implications of the sheer amount of learning involved. Note also that Tsur’s key examples are of highly experienced military officers.) This does not mean that we are arguing that negotiators require a lot of formal education in order to deal with wicked problems. Jayne has used these teaching techniques successfully in workshops with participants without significant formal education. But getting participants to actually transfer what they have learned in the safety of a workshop to their far more tumultuous and risk-laden lives requires continued coaching and support. Nor do we anticipate students taking a single semester-long or intensive course on negotiating adaptive problems to successfully apply their new knowledge to real cases. We believe courses or workshops need to be followed up with real-world practice accompanied by coaching or mentoring and/or opportunities to apprentice with more experienced negotiators. This will also be addressed in more detail in chapter 19 (and again, in Crampton and Tsur, *Negotiation Stands Alone*).

**Notes**

1 Generally speaking, we see complex engineering and technical problems as wicked when they also involve adjusting deeply held beliefs and/or entrenched patterns of human behavior, and their social, political, and legal institutions. It is probably more helpful to think about technical problems and wicked problems as occupying a continuum, with some grey area in between where a problem might be “sort of” wicked.

2 For an earlier effort to unpack unspoken mental models that influence the way we approach negotiation, see Jayne’s chapter “The Unstated Models in our Minds” in *The Negotiator’s Fieldbook* (Schneider and Honeyman 2006).

3 Narrative mediation (Winslade and Monk 2000; Winslade and Monk 2008), on the other hand, focuses on both personal change and the way that changing our story about a situation opens up new options for living more constructively into a transformed future. We see promise in this approach; Jayne is developing her course based on narrative practices and it will be called Narrative Negotiation.

4 It is not just these problems that are adaptive; the solutions also require a complex and adaptive set of structures. See also Calvin Chrustie’s focus on development of suitable structures, in *Playing the Percentages in Wicked Problems*, in this volume.

5 Our “crew” is actually larger than the two authors of this particular chapter. At various times and for different purposes it has included Calvin Chrustie, Chris Honeyman, Howard Gadlin, Jamil Mahuad, David Matz, and Rachel Parish.

6 Military Arts and Science, as an academic field, could be considered a sub-set of Political Science or Public Administration as it is taught in the professional military education institutes that are accredited to confer a Master of Military Arts and Sciences academic degree. The U.S. Military’s expanded roles in counterinsurgency, peace, and humanitarian operations have caused
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the military to question some of its fundamental principles and traditional thinking about its purpose. This has led to a re-examination of professional education methodologies and concepts, to incorporate theories and concepts from other fields such as political science, economics, and anthropology. The study of peacebuilding may be seen as an outgrowth of the field of conflict analysis and resolution. The concept of peacebuilding and its practices and scope are not well established. See Henning Haugerudbraaten (1998) for an overview of the debates about peacebuilding – what it entails, who does it, and how it is accomplished. Jayne’s university program and practice are organized around the following definition:

Peacebuilding is the set of initiatives by diverse actors in government and civil society to address the root causes of violence and protect civilians before, during, and after violent conflict. Peacebuilders use communication, negotiation, and mediation instead of belligerence and violence to resolve conflicts. . . The ultimate objective of peacebuilding is to reduce and eliminate the frequency and severity of violent conflict. See http://en.wikipedia.org/wiki/Peacebuilding.

While there is a growing role for peacebuilding professionals, peacebuilding activities are usually undertaken in conjunction with other professions such as development, education, the pursuit of justice through formal and informal means, trauma healing, leadership training, organizational development and governance reform.

Sanda Kaufman, in particular, noted that so-called wicked problems (though she did not like that term) are the norm rather than the exception in design and public policy arenas. We agree. However, the fields of public policy and applied peacebuilding have yielded a mix of approaches to these problems, some more useful than others. We particularly appreciate the work of John Forester (1999, 2009), John Paul Lederach (1997), Stephen Daniels and Gregg Walker (2001), Peter Adler and others (2000; 2002). They do not try to impose linear, problem-solving processes on conflicts that are inherently non-linear and emergent. Unfortunately, their practices have not yet penetrated most negotiation classrooms.

“Kinetic operations involve application of force to achieve a direct effect, such as artillery, infantry, aviation, and armored offensive and defensive operations. Non-kinetic operations are those operations that seek to influence a target audience through electronic or print media, computer network operations, electronic warfare, or the targeted administration of humanitarian assistance. It is important to note that many operations do not fall neatly into one category or another. For example, a security patrol may have the power to apply force (a kinetic operation), but over time, if its consistently professional conduct earns it the respect of the local populace, its presence can become a non-kinetic effect – if not a complete operation in itself” (Richter 2009:104). The military profession makes the claim “Among all professions, our calling, the Profession of Arms, is unique because of the lethality of our weapons and our operations.”

The growing challenge of civilian peacebuilders working alongside military units in locations of instability has led to increased dialogue about civil-military cooperation. See Robbert Gabrielse (2007) for a discussion of the problems related to coordinating development, diplomacy and defense agencies in the same challenging context. When we add non-governmental organizations (NGOs) to the mix, the problem is even more complicated (Franke, 2006; Gourlay, 2000). This logically leads us to speculate about the need for
cross-training between our students. For now, however, we are each focusing on what it takes to teach our own students how to negotiate wicked or adaptive problems.

11 The concept of structural violence is commonly ascribed to Johan Galtung (1969). For our purposes the description and explanation of structural violence developed by James Gilligan (1996) is a good summary of the problem. Structural violence is evidenced by “the increased rates of death and disability suffered by those who occupy the bottom rungs of society, as contrasted with the relatively lower death rates experienced by those who are above them.” These excess deaths are non-natural; they are a consequence of the stress, shame, discrimination, and denigration that results from lower status.

12 Governance describes the process of decision-making and the process by which decisions are implemented (or not implemented). The term governance can apply to any group decision-making process and the systems for ensuring implementation of collective decisions. Thus, we can talk about governance in corporations, international organizations (e.g., United Nations, International Monetary Fund, World Bank), national or local political systems, organizations (including civil society organizations and non-governmental organizations or NGOs), faith-based organizations, or traditional societies (e.g., clan-based or tribal systems).

13 In many parts of the world, people live under multiple governance systems – post-colonial systems, tribal or clan systems, and religious systems – and disputes over the legitimacy of these systems is a constant source of uncertainty and conflict. This is not, however, only a problem in post-colonial societies. Similar disruptions to governance systems can take place in modern bureaucratic settings, for example after a corporate merger. See Docherty (2005) and the work of Walton, Cutcher-Gershenfeld, and McKersie (1994; 1995).

14 Notice that we value the concept of society as an emergent system because it is useful, not because it is “true” in some ultimate sense. There are other ways of looking at society that are equally accurate and equally interesting and revealing. The real test for a practitioner wanting to deal with a situation is whether a way of thinking about the problem yields insights that can guide action, and whether those actions achieve outcomes deemed to be positive. And as soon as we talk about positive outcomes, we point to the fact that all forms of social practice, including negotiation, are loaded with ethical assumptions. Elsewhere, Jayne has argued that “every negotiation encounter involves social ethics (general societal principles of right and wrong) and not just procedural ethics (typically incorporated into professional codes of conduct)” (Docherty 2010: 499).

15 See the video on emergence located at http://www.youtube.com/watch?v=gdQgoNitl1g&feature=related (last accessed December 12, 2012).

16 Individuals or groups with lower social status may be allowed at the table, perhaps even required to be at the table by a rule such as UN 1325, which requires women’s participation in negotiations to end armed conflicts. Or they may be prohibited from participating in negotiations on their own behalf. Furthermore, once in the negotiation how they may speak, what they may say, when they may talk, and the personal consequences as a result of their negotiation behaviors are all shaped by socially negotiated norms. See for example Tinsley, Cheldelin, Schneider and Amanatullah (2009) or Bowles and Babcock (2008) regarding the social and economic consequences for women as compared with men when negotiating for compensation in the workplace.
The bad news is that groups and societies locked in these conflicts create fractal patterns that start to permeate all parts of the society. (See Gadlin, Matz, and Chrustie, *Playing the Percentages in Wicked Problems*, chapter 20 in this volume.) Domination and control mechanisms or zero-sum conflict patterns operating at the largest social level are repeated in schools, religious communities, businesses, families, and so on. The good news is that fractal patterns can be disrupted at any level and disruptions in the pattern can cascade over into other areas. This is why Coleman (2011) focuses on “local actionables” (137) and argues we need to “aim to alter patterns, not outcomes” (95). The art of peacebuilding is largely in selecting the domains that are ripe for changing patterns of thinking and acting and knitting those domains together to maximize the spillover effects of change.

Laurence de Carlo (2005) has developed a similar teaching process that indicates that the input of new information, ideas and research need not be strictly sequential. Using a CD, he makes ideas, research, and theories about negotiation available to students during an extended (multi-week) learning process. The students decide whether, what and how much of the material to use. During debrief sessions, the materials are discussed, and students often alter their use of the material in subsequent weeks. In our view, this creates a meta-level learning experience where students are learning to be reflective, creative practitioners capable of sorting through a lot of information “in the moment” – which is what they will need to do in real negotiations. Jayne has done something similar in strategic peacebuilding classes, but the materials she gives students tend to be tools such as manuals for planning interventions rather than summaries of pure research. In workshops with participants working in second languages or participants with minimal formal education, this strategy would need to be significantly modified.

We do not like the mental model of education implied by the word training. Jayne prefers the idea of a workshop, which implies that the participants and the instructors all bring critical information into the process where they engage in shared learning and discovery. Indeed, much of Jayne’s thinking presented here and in prior papers on negotiating wicked problems was learned in collaboration with workshop participants in Lebanon, Thailand, and Myanmar. Similarly, Leonard prefers to use the term “practicum” as used by Donald Schön in his 1995 book *Educating the Reflective Practitioner*. Much of Leonard’s thinking, similar to Jayne’s, is based on experience gained in collaboration with his elective seminar students utilizing a “practicum” or “workshop.”

**References**


U.S. Department of the Army. 2008. CGSC “Experiential Learning Model” Job Aid. Faculty and Staff Development Division, Command and General Staff College.


Appendix

CGSC ELM Model Based on Kolb

The Experiential Learning Model (ELM) Job Aid, Faculty and Staff Development Division, U.S. Army Command and General Staff College, Ft. Leavenworth, Kansas