Managing Conflict in Construction Megaprojects: Leadership and Third-Party Principles

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This article examines the importance of conflict resolution skills and techniques when managing the complex relationships and interdependence necessary for large-scale construction projects. Partnering between multiple public and private organizations is often required in order for these projects to succeed. The authors examine the specific partnering skills that contributed to the success of the Woodrow Wilson Bridge project.

When it comes to opportunities to offer conflict intervention services, the conflict resolution field is more varied and dynamic than most might think. As Mayer (2004) points out, new practical challenges arise as the field evolves in regard to “Who we say we are and what it is we say we do” [emphasis added.] We add to Mayer’s insight: “. . . and where we practice our craft.” This march into other areas is, in our opinion, a good thing. Over the last twenty-five years, formal conflict resolution practice has moved well beyond established areas of public decision making in fields such as environmental conflict resolution (Lewicki, Gray, and Elliott, 2003; O’Leary and Bingham, 2003), public policy (Carpenter and Kennedy, 2001; Susskind, McKearnan, and Thomas-Larner, 1999; Thomas, 1995) and international conflict resolution (Lederach and Jenner, 2002; Nye, 2007) into other areas of public concern that are less well known.

Without much fanfare, conflict intervention practice has moved into highly specialized public and private arenas as industry insiders incorporate basic conflict resolution skills into their occupational skill sets. These applications are making great developmental strides, and yet the lessons and
insights they impart are not readily visible to the larger conflict resolution community. These parallel developments deserve more observation in order to advance the field as a whole. One such arena of specialized conflict intervention practice lies within the construction industry, a venue that can be highly complex, exceptionally technical, scientifically driven, and until recently legally dominated.

Construction of major public infrastructure in the United States and elsewhere is a notorious cauldron for conflict. Conflict may arise in many ways: contractors make claims against owners, designers fight blame for errors, and the public often feels left out of decision-making forums. Builders may face environmental challenges that the designers didn’t consider, or nearby residents may object only after the project begins. These and a hundred other scenarios play out in the construction industry every day. They lead to cost overruns, delays, safety issues, inconvenience to the public, and time-consuming litigation. Happily, these forms of conflict have not characterized the Woodrow Wilson Bridge Project, the subject of the case study described in this article.

For years, the continuous threat of litigation created a situation where good design and construction decisions were hijacked by the need to reduce exposure to liability and litigation. The construction industry was ripe for change. At the Pound Conference in 1976, Chief Justice Burger asked, “Isn’t there a better way?” in reference to administration of justice. This now-famous quote became the most recent symbolic starting point in the call for judicial reform. By the early 1980s, a period of rapid change had arrived, with the business and legal communities grown weary of the destructive force stemming from the rising numbers and costs associated with litigation. Indeed, discussion of new methods of administration of justice took on a more important tone (Canon, 1985). For its part, the business community began to shift its management practices by adopting programs such as Total Quality Management (TQM).

The construction industry soon followed suit. It was particularly primed for change, being inundated by the rapid rise in cases with unresolved claims heading to litigation. Harking back to Chief Justice Burger’s question, it was readily apparent that new strategies and methods would be needed to address the traditionally adversarial environment plaguing the construction community (Associated General Contractors of America, 1995). To stem the tide and address the source head-on, the construction industry began to explore and experiment with alternative dispute resolution methods such as mediation and minitrials (Carr, 1999). More specifically,
in 1987 the Construction Industry Institute (CII) at Texas A&M University formed a task force to explore new ways of conducting construction industry business more effectively, that is, with an emphasis on preventing and reducing disputes and conflict. The task force explored ways to create a process that would reverse the trend of litigation in construction (CII, 1991a). The process they examined has now come to be referred to as “partnering.” Partnering is defined as a long-term commitment between two or more organizations for the purpose of achieving specific business objectives by maximizing the effectiveness of each participant’s resources. The report went on to state that “the relationship is based upon trust, dedication to common goals, and an understanding of each other’s individual expectations and values.” The benefits of partnering were described as “improved efficiency and cost effectiveness, increased opportunity for innovation, and the continuous improvement of quality products and services” (CII, 1991b). The CII task force went on to identify the risks and benefits of partnering, provide guidelines on the process, and define the relationship between partnering and the construction contract.

At the Woodrow Wilson Bridge Project, the two state agencies responsible for hiring designers and construction contractors to build the project both advocate partnering. The Maryland State Highway Administration (MSHA) and the Virginia Department of Transportation (VDOT) each has explicit policies and contract provisions to implement partnering. In its Field Guide for Partnering for VDOT Projects (2005), VDOT describes partnering as a relationship in which:

- Trust and open communication are encouraged
- Parties address and resolve issues at the lowest possible level
- Parties respect each other’s goals and values
- An atmosphere conducive to cooperation and teamwork is created

The partnering relationship is fostered by practicing a series of steps, as illustrated in Figure 1, which show the Maryland SHA version of the process that reinforces structured and frequent communication (Polkinghorn, La Chance, and La Chance, 2006). After a preplanning meeting, a workshop is held (often one day long) in which representatives from all sides share their aspirations for the project and work to identify and solve problems. On a regular cycle after the workshop, the parties assess their progress as a team, using both a survey instrument and discussion in person. At the
Woodrow Wilson Bridge Project, the survey instrument takes the form of an Internet-based questionnaire hosted on the project’s Website. This allows ratings to be collected conveniently and presented for analysis at the current periodic partnering meeting, to great advantage (Anderson, Douglass, and Kaub, 2006). Both state agencies explicitly declare that partnering does not change the legal relationship of the parties to the construction contract. However, well-disciplined partnering cultivates an atmosphere where communication occurs to prevent or correct misunderstandings, build trust, and find solutions that benefit everyone.

Good partnering processes also balance the need to familiarize parties with conflict prevention skills through modeled behaviors while simultaneously exploring the substantive technical issues of the project itself. Functionally, partnering acts as a diversion system for potential conflict and a problem-solving forum to transparently join the project team to politicians and the public throughout the length of the project.

A dedicated guild of professionals exists just to deal with construction industry conflict: attorneys, expert witnesses, schedule analysts, mediators,
arbitrators, dispute resolution board members, dispute systems designers, conflict coaches, and others. However, because of construction's technical nature it takes more than experts in conflict processes to manage complex construction projects. The case study given here examines the remarkable parallelism between the processes and leadership tools and skills that have evolved within the construction industry and those belonging to the more formal field of conflict intervention.

The Case for Doing It Right

Replacing the Woodrow Wilson Bridge—over which Interstate 95 crosses the Potomac River in Washington, D.C.—had all the ingredients necessary for protracted and litigious conflict. As the “national bridge,” it has huge symbolic visibility. U.S. senators and members of Congress cross the bridge daily, along with about two hundred thousand other commuters. Because of its location, the project always experiences scrutiny above and beyond the norm. The dollar stakes are huge: it is one of the most expensive highway construction projects in U.S. history at $2.5 billion overall. The duration is long: thirteen years of construction, allowing plenty of time for issues to develop and relationships to sour. The interfaces are many: twenty-one major construction contracts, each with potential to delay the other parties or otherwise cost some entity money. The new river crossing itself is a technically complex structure with a number of notable components, including the world’s largest eight-leaf drawspan supported by graceful (but tricky to build) V piers.

The project is equally complex from an organizational perspective. Its 7.5 miles of highway span three jurisdictions, requiring a completely new way of envisioning the program management process (see Figure 2). The new Woodrow Wilson Bridge itself and two major interchanges east of the Potomac River are being constructed by the MSHA. VDOT is responsible for rebuilding two other major interchanges west of the bridge within the Commonwealth. In addition, a small portion of the bridge span just enters the southern tip of the District of Columbia. Because of its billion-dollar-plus size, it has been designated a “megaproject,” comprising both state programs, and is overseen by the Federal Highway Administration (FHA). This means overlapping scrutiny of expenditures from the public purse, requiring more transparent and effective management coordination efforts. The project has emphasized prevention of disputes using early warning systems (prevention tools)—a tenet of conflict resolution
central to the literature. At the same time, all three government agencies (VDOT, MSHA, and FHWA) covet favorable public opinion and need to respond to public demands and sundry elected officials.

Despite these enormous risk factors, the Woodrow Wilson Bridge is a huge success; it has been constructed with much less conflict than circumstances might have predicted. Much of the credit can be attributed to three factors: (1) awareness by project leadership of the immense public scrutiny a major infrastructure project can draw; (2) leadership that responds to political and public demands (both previously mentioned); and (3) leadership that employs conflict prevention and management philosophies, tools, and processes efficiently and effectively. Tools from the low end of the conflict resolution spectrum (such as partnering and dispute resolution boards) have been used to good effect. One hallmark of the partnering process is use of an “issue resolution ladder.” This is a map specifying how to address problems starting at the lowest face-to-face level on the construction site and proceeding up to the highest level within the board room. At their root, these tools and processes are the basis for many popular books within mainstream conflict intervention practice; see Constantino and Merchant (1996); Fisher and Ury (1981); and Ury, Brett, and Goldberg (1988).
The authors acknowledge that these partnering tools helped inoculate the Woodrow Wilson Bridge program from serious conflict, but more particular to partnering’s success was their use in a remarkably progressive leadership context. As is detailed below, it has been specific individuals employing various conflict prevention and management skills that make this megaproject such a success. The principles behind the actions of these leaders are remarkably congruent, with many of the principles articulated in the classic conflict resolution literature, as we shall explain.

The Wilson Bridge project is a success by nearly every program measure. For instance, re-advertising after a potentially budget-busting single bid for the main bridge superstructure, the project has stayed on or ahead of schedule and very close to its original cost estimate. With a highly qualified team of designers, contractors, environmental scientists, and program managers, the project withstood scrutiny at every level. Program management was supported by a general engineering consultant (GEC), which served as an extension of staff to the public owners. The GEC applied best practices to safety, scheduling, public outreach, and congestion management with amazing results. The project has earned acclaim in the trade press, from engineering societies, television coverage (on the Discovery Channel and History Channel), and from the general media, even above-the-fold coverage in the New York Times. In 2008, the American Society of Civil Engineers selected the Woodrow Wilson Bridge project to receive its OPAL Award for Outstanding Civil Engineering Achievement, which is generally regarded as the highest honor in the international civil engineering and construction industry.

The Wilson Bridge was not just lucky in avoiding the stressors that so often provoke conflict. Its circumstances were fertile ground for conflict, and many potentially contentious issues arose. But the problems that did arise were either prevented or managed effectively—sometimes morphing into opportunities or at least providing “teachable moments” whereby the entire enterprise could learn and improve.

On this project, formal partnering is the backbone of the formula for success. The owners and contractors entered into eighteen formal partnering agreements, with most groups meeting monthly or bimonthly for the duration of each contract. The team for the Virginia Approach Span met more than forty-five times. Two of the Virginia contracts also set up individual Dispute Resolution Boards (DRB). DRBs are designed to hear disputes before a three-person team of neutrals and provide nonbinding recommendations to the owner and contractor for resolving them. These
DRBs met three times per year, just to stay informed about progress, but neither was ever called on to resolve a dispute. Effective communication and creative problem solving—fostered, we assert, by a particular leadership philosophy and context—relegated the DRBs to simply forces in being.

Several senior leaders on the owner-GEC team jointly shaped the leadership philosophy and context under which this project has flourished. In isolation and without the benefit of formal conflict resolution training, but through years of experiential learning via complex problem-solving experiences, the Wilson Bridge leadership team artfully managed the process as well as the best in the conflict resolution field.

Research Methodology Data Collection and Analysis

Because of the size and complexity of the case, the research methodology benefited from direct participation in various aspects of the project. Researchers knew where to locate multiple data collection sets and employ various data collection techniques (participant observation, interviews, surveys, existing project databases) that, taken together, help to explain the overall dynamics of the case. We have taken complete advantage of the fact that one of the authors is directly involved with the project and is charged with collecting data relating to the partnering projects. The other author is one of the partnering facilitators and a university researcher. By being directly involved in various aspects of the project, we employed an action research methodology (Stringer, 2007) that allows us to gather data while being engaged in various parts of the project.

Action research also allows us to more thoroughly employ various data collection techniques and sources. Data were collected by participating in meetings and taking notes. Notes were also taken while viewing videotaped interviews of key personnel and project leaders recorded since near the start of the project. These videotapes are extremely valuable data sources as they capture key insights on unforeseen aspects of the project and thus became the starting point for a growing file of lessons learned. It was imperative to interview these individuals while the incidents and insights were still fresh in their mind and because many of the participants have changed employment over the ten-year period and are no longer easily accessible. Other data have been gathered from past and current managers on key problem-solving insights. Further data have been drawn from a selective inventory of project documentation believed to be unique on the Woodrow Wilson Bridge Project, such as its contract special
provisions for safety, scheduling, and coordination among contractors. Some of these data come from databases while others are drawn from personal observations of the principal researcher, identifying noteworthy project turning points, such as a contractor-suggested change to the construction sequence that avoided many months’ delay.

Once collected, data were organized into a “lessons learned” Microsoft Access database that currently numbers 374 distinct lessons. The database structure is organized to reflect both the data collection method and the intended use of the lessons. Because so many lessons have been harvested from videotaped interviews, one table is dedicated solely to managing videotape source material. Another table is dedicated to managing the intellectual property rights to the sources, with a future knowledge-sharing product in mind. The main table records present individual lessons learned, which are then linked to the other affiliated tables. The lessons-learned table has a variety of subject-matter sorting codes and thematic fields in addition to the basic lesson information. This allows us to search the database to test hypotheses at a variety of levels of specificity, because there are forty-one fields in each lesson record. All of the 374 lessons collected to date, for the purposes of this study, have been clumped into ten meta-categories on leadership insight that are presented in the next section.

Leadership Insights and the Effective Management of Conflict

As the Wilson Bridge passed the halfway point, the supporting organizations began the process of gathering the lessons learned so they might be shared with other transportation infrastructure project sponsors. The 374 lessons have been categorized into the ten meta-categories shown in Figure 3.

During the early phase of data gathering, one of the project leaders articulated a leadership philosophy for the project that essentially fits a classic, human-relations framework and was used as the starting point for development of the categories shown in Figure 3. They can be studied, taught, and emulated. They fit particularly well within basic communication and conflict resolution practice literature, and they are predicated to some extent on needs-based and identity-based theories.

Indeed, the overlap between these ten leadership insights emanating from the 374 lessons and the conflict resolution literature is astounding. Taking just a few principles from four well-known books within the field shows the parallels between mainstream conflict resolution practice and
what is found in the Woodrow Wilson Project. Being mindful that the advances in conflict prevention and intervention in the construction industry have occurred largely outside the mainstream, we find these similarities and parallels are all the more impressive.

Table 1 supplies a number of basic principles identified by leading practitioners and scholars in the conflict resolution field. They will be used to make direct comparisons to the lessons learned from the leadership insights stemming from Woodrow Wilson Bridge project lessons-learned database. In particular, we have taken four well-received books that focus on:

1. Individual approaches to principled negotiation (Fisher and Ury, 1981 [herein, F&U], pp. 3–98)
2. The various means of preparing for and running effective problem-solving meetings in public disputes (Carpenter and Kennedy, 2001 [C&K], pp. 52–65)
3. Approaches to dealing with sometimes hostile parties, especially in public disputes (Susskind and Field, 1996 [S&F], pp. 37–42)
4. How to effectively design conflict management systems for organizations (Constantino and Merchant, 1996 [C&M], pp. 46, 117–133)

Granted that there are many more texts and manuals dealing with the same topics, these four are used for comparison because each contains classic conflict models, theoretical constructs, and strategic advice born directly
### Table 1. Sampling of Basic Conflict Analysis, Prevention, and Intervention Principles

<table>
<thead>
<tr>
<th>Authors and Books</th>
<th>Focus for Framing Conflict Intervention</th>
<th>Basic Principles of Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fisher and Ury / Getting to Yes</td>
<td>Basics of Principled Negotiation</td>
<td>1) Don't bargain over positions</td>
</tr>
<tr>
<td>Carpenter and Kennedy / Managing Public Disputes</td>
<td>Intervener Tasks, Strategy and Process Considerations</td>
<td>2) Separate the people from the problem</td>
</tr>
<tr>
<td>Suskind and Field / Dealing with an Angry Public</td>
<td>Approach to Parties and Process</td>
<td>3) Focus on interests, not positions</td>
</tr>
<tr>
<td>Constantino and Merchant / Designing Conflict Management Systems</td>
<td>Process, System, and Program Coordination</td>
<td>4) Invent options for mutual gain</td>
</tr>
</tbody>
</table>

#### Basic Principles of Practice

1. Don’t bargain over positions
2. Separate the people from the problem
3. Focus on interests, not positions
4. Invent options for mutual gain
5. Insist on using objective criteria
6. Parties should help design the process and solution
7. Lasting solutions are based on interests, not positions
8. The process must be flexible
9. Think through what might go wrong
10. Do no harm

#### Focus for Framing Conflict Intervention

1. Conflicts are a mix of procedures, relationships, and substance
2. To find a good solution, you have to understand the problem
3. Take time to plan a strategy and follow it through
4. Progress demands positive working relationships
5. Negotiation begins with a constructive definition of the problem
6. Focus on building long-term relationships

#### Notes

- Abbreviations referencing the principles within the text will read: Fisher and Ury = F&U, Carpenter and Kennedy = C&K, Suskind and Field = S&F, Constantino and Merchant = C&M.

**Note:**
from practical experiences of the authors. They are therefore most appropriate for comparison to the practices adopted for the Woodrow Wilson Bridge Project. Together, these four texts also nicely frame complex public disputes from a practical and programmatic perspective.

We now compare the leadership insights in the Woodrow Wilson Bridge case to the conflict prevention and management principles mentioned above. By direct comparison we first note the parallel practices, and second we give examples of the effective use of these insights in prevention of disputes that could have morphed into conflict and subsequently derailed major portions of the project.

**Insight One: Establish and Maintain Public Trust**

This insight drives most actions taken on the project. Developing and maintaining trust begins with previous encounters or the reputation that key participants bring to the project. Trust is not a situationally specific trait. This insight is captured perfectly in S&F’s principle five; it is clearly seen in all four works, and a good deal of attention is given to it (S&F at pp. 79–81; C&K at pp. 205–216), and it appears in the research literature (for example, Butler, 1991; Lewicki and Bunker, 1996). This means project leadership must establish reasonable expectations—for example, by not lowballing the cost estimate or promising an unattainable completion date—and then meet those expectations. The leadership must approach the public with genuine regard for their individual interests (F&U principle three; C&M principle one; C&K principle seven) and take steps, when necessary, to minimize impacts adverse to their interests (S&F principle three). It means being fully transparent in words and actions, entirely willing to see those words or actions reported on the front page of national papers the next day.

A great example of applying this insight was VDOT’s response to the “Hunting Terrace Ceiling Crisis.” VDOT purchased three apartment towers and eight garden-style apartment buildings adjacent to the bridge site, all of 1950s-vintage construction, to facilitate construction. In late March 2004, defective ceilings collapsed in two unoccupied apartments, likely triggered by nearby construction vibration. No one was injured, but the adjacent tenants were rightly concerned, and local news outlets started to focus a great deal of attention on the story. Putting concern for the construction schedule on hold, VDOT earnestly made tenant safety the first priority. With help from the GEC, VDOT performed a rapid condition
survey, planned and performed ceiling replacements, and extended white-glove treatment to all the tenants who had to be moved out during the repairs and then moved back in. Professional moving and storage companies handled the moves, overseen closely by the GEC, and comfortable temporary quarters were offered in nearby hotels. By early June the ceilings were replaced, tenants were moved back in, and the crisis was just a memory. The handling of this crisis, which placed great sensitivity on tenant needs, helped win and maintain public trust (see also S&F principle three).

**Insight Two: Prevent Counterproductive Behaviors**

Counterproductive behaviors are not a rarity in the construction industry, traditionally a *macho* culture where dominance inures to the benefit of those who assert it. However, for this megaproject to flourish, key project leaders taught their team to prevent certain behaviors from occurring:

- Insisting on having the last word
- Exhibiting a need for absolute control
- Exercising a need to even the score at all costs
- Relishing the opportunity to “teach them a lesson”
- Forgetting that it’s business, and instead making things personal

Leaders knew that stooping to these behaviors—as gratifying as it might feel—would limit communication and inflame personal animosity. Rejecting these behaviors offered the best chance to advance important mutual goals.

With eighteen major contracts formally partnered, the Woodrow Wilson Bridge project has been better than most at preventing counterproductive behavior. Now and then, difficult problems arise—problems just too hard for the onsite team members to resolve. These thorny issues can take on so much emotional investment that it becomes hard for the frontline participants to make progress solving them (see C&K principle one). The antidote for this was to create a next echelon to which the frontline participants (people at the job site) could refer their disagreements. With only the most senior executives in the room, each to some degree dependent on the other, having a stake in the outcome and no audience to impress, the necessary decisions and compromises got made (see C&K principle four and C&M principle five).
Insight Three: Keep Senior Management Informed

This insight applies full well at every level in the organizational chain, from the governor of each state down to the supervisors on the work site (see S&F principle four and C&M principle four). In a healthy situation, it means knowing which decisions can be made at the field level, face-to-face, and which need to be raised to a higher level where proper authority for the decision lies (C&M principle three).

In formal partnering, the issue resolution ladder puts time limits on decision making. If something cannot be decided between peers in a reasonably short time, it gets elevated to the next-senior level for a decision. Although efforts are made to reach decisions at the job site level (C&M principle two), they sometimes need to rise to a higher level using a well-understood process. Used properly, the issue resolution ladder precludes someone from sitting on an issue that seems “too hard.” Owner and contractor peers each have the option to say “Let’s send this up the ladder” when agreement cannot be reached at their level, and they know exactly where the issue must go (C&M principle three). If a decision can be reached at the lower level, the next level merely needs to be informed about it rather than being enlisted to make the decision (again, C&M principle two).

At least, that is how it typically works—but not always. In summer 2006, a situation arose on one of the Virginia interchange contracts. Setting steel beams for one overpass, the contractor’s dimensional control fell out of tolerance and went uncorrected. The GEC’s inspectors, as it later turned out, were aware of this discrepancy at the time but did not use the issue resolution ladder to rectify the problem. Once the error was finally confronted, costly rework was required that set back the construction schedule. The contractor bore the cost of performing his rework, and the GEC absorbed the cost of re-inspection.

The GEC organized a facilitated discussion (with twenty-three participants) to figure out why the inspectors had not felt more compelled to “keep senior management informed” (S&F principle four, C&K principle eight, C&M principle one). Polling during the session—anonymous, but attributable to subgroups—was very revealing. Eighty-five percent of the managers felt they “almost always” or “very often” encouraged employees to send messages upward, but only 35 percent of the inspectors felt this way. One hundred percent of the managers felt they responded to the information received from their subordinates “almost always” or “very often,” while only 33 percent of the inspectors believed this to be the case.
principle three, C&K principles two and three). Some GEC inspectors had come to believe that bringing issues up the chain was futile; the contractor would too often prevail in overturning an inspector’s objection by referring to a “deal” struck with the owner’s top management. A key lesson was learned: for senior management to stay informed, the managers needed to do a better job telling their subordinates what became of information sent up the chain and sharing the rationale for any deals struck with the contractor (S&F principle five, C&K principle six).

**Insight Four: Make Decisions to Increase Bid Competition**

The acquisition strategy used for the Woodrow Wilson Bridge project was the traditional model: competitive bids were taken after contract plans and specifications were complete. This traditional model leaves no opportunity to mitigate conflict by selecting a contractor on the basis of a good reputation for fair dealing. However, the low-bid model is the default choice in public infrastructure procurement because it eliminates any hint of favoritism in the choice of contractors, and it ensures that the public is paying a fair market-based price for infrastructure. Getting a fair price requires good plans and specifications, plans free of ambiguity and clear in addressing likely bidder questions. Parsons Transportation Group (PTG) had prepared a fine set of plans and specifications for the new Woodrow Wilson Bridge river crossing, articulating in detail how their award-winning design was to be implemented.

Notwithstanding these fine plans, the Woodrow Wilson Bridge project was nearly derailed by insufficient competition. When MSHA solicited bids for the main river crossing superstructure in December 2001, only one firm submitted a bid. It was for $860 million, against an estimate of just $487 million. MSHA rejected this bid and went back to the drawing board with PTG. With input from a select group of outside advisors, the Maryland deputy bridge chief and GEC design manager adopted many ideas to increase competition: the package was divided into thirds, and the supporting girder system was changed to a type more readily available, one that could be trucked to the job site instead of being shipped by barge (C&K principles two, eight, and nine; F&U principle four; S&F principle two; C&M principle one). MSHA tried hard to rouse contractor interest in the rebid, and they succeeded in having several prospective bidders respond to each package. The three new contracts together totaled $362 million less than the single bid received at first; their sum, $498 million, was very close...
to the original estimate (Douglass, Healy, Mohler, and Cleveland, 2004). Just as contractors need owners, owners need contractors to bid.

Taking steps to repackage the bid, to reframe the project to obtain an outcome closer to the budget, took leadership of a special sort: a willingness to confront assumptions and open the institution to outside ideas. Increasing competition in this case had little to do with minimizing conflict, but it had everything to do with saving the project.

Unbeknownst to the management team, this dilemma of not having enough competition, which may seem counterintuitive, is an ideal starting point when seen through the lens of Deutsch’s theoretical work (2000) in the areas of cooperation and competition. In essence, by increasing competition and repackageing the bid process more contractors took part in deliberately creating an interdependent relationship with other contractors. Because repackageing the single superstructure bid into three separate acquisitions would result in more complexity within the megaproject management, it also required a greater level of cooperation. In other words, even though there were other factors involved, inducing competition necessitated greater cooperation in achieving shared goals. There will always be some controversy in complex projects, but the interdependent nature of this project reframed such episodes as constructive controversy wherein the expected emphasis on disagreement and disputing had to be replaced with emphasis on clarifying and gaining greater insight from the other parties.

Insight Five: Make Friends with Key Stakeholders

Perhaps the short title for this insight gives it insufficient weight; it might be misread as implying superficiality or flattery in relationships. The point is that participants need to cultivate strong relationships at the personal, professional, and institutional levels among all stakeholders who would influence outcomes. One key leader indicates it is easier to make friends when there is not a crisis; waiting for a crisis to get to know key stakeholders is a big mistake (F&U principle two, C&K principle four, S&F principle six).

At the Wilson Bridge project, relationships were fostered in many ways. Building relationships often meant an investment of time on the part of project officials appearing at a meeting, daytime or evening, with a particular group and taking questions. Sometimes it meant simple things such as offering a project tour or making a presentation to a schoolroom class. Experiences from this project indicate that relationships are strengthened when individuals and organizations feel their contributions are recognized and appreciated. Small mementos, from disposable pens up the scale to
commemorative coins and the occasional end-of-career plaque, may have been more important than was initially realized.

Doubtless the most important contributor to strong relationships was the Wilson Bridge Project’s acquired reputation for keeping its commitments (S&F principle five). If a new ramp was announced as opening on a certain date, the date was honored. If problems arose that had an impact on the public, they were promptly recognized and taken care of. If a work zone was advertised as obstructing traffic only until 6:00 A.M., it was cleared by 6:00 A.M. Environmental permit conditions were watched scrupulously, and if noncompliance was detected it was corrected immediately. Commonsensical as these examples sound, they are not the industry norm. At the Wilson Bridge, close involvement by the environmental and construction management teams translated good intentions into performance, deftly and consistently.

The stakeholder relationships nurtured in the environmental arena were among the most critical to the project’s success. The GEC environmental manager made it a point to be honest and forthcoming with the environmental regulators, telling them the whole truth even when doing so was uncomfortable (S&F principles four and five). As a result, the GEC environmental manager earned positive standing with the regulatory agencies. His credibility allowed him to approach them openly to discuss how to improve productivity with arguably neutral effects on the environmental permit commitments. One result was agency approval for a permit modification to use an ingenious sliding accessway for constructing the draw-bridge portion of the river crossing (a drawbridge is often referred to as a “bascule”). This scheme proved essential to the bascule contractor’s schedule and productivity; the accessway would block the navigation channel when extended, but it could be retracted to allow vessels to pass. It allowed the contractor to bring people and materials (especially pumped concrete) efficiently to build the new bascule pier on the far side of the channel. The sliding accessway had no discernable environmental impact, but it was not indicated in the drawings included with the environmental permit application. Had the relationship with the regulators been a negative one, they might have arbitrarily chosen to reject the requested modification.

Part of the GEC environmental manager’s success in being able to win approval for permit modifications dated back to the permit request development process. A concerted effort was made then to forecast and incorporate the likely contractor impacts accurately in the permit application. The fact that the impacts were forecast reasonably and accurately harks back to insight one (“establish and maintain public trust”). An important
outcome of this collaboration was that the permits contained enough potential offsets that a change to a contractor’s plans could be negotiated with no net impacts on balance (S&F principles three and five).

The GEC won approval for many other important permit modifications, based on their merit—but also contingent on the access fostered by the good stakeholder relationship. A corollary to this phenomenon was that the construction contractors came to respect the GEC environmental manager’s prowess at winning permit modifications. As a direct consequence, the contractors wholeheartedly supported the environmental compliance behaviors needed for him to maintain credibility with the regulators. There were no cat-and-mouse games.

**Insight Six: The Manager Is Not Smartest About Everything**

This insight should not be taken as denigrating the talents or abilities of senior project leadership. It is more a cautionary note, strongly linked to insight two (“prevent counterproductive behaviors”). It would be very easy for a person at the helm of a multibillion-dollar enterprise to think quite highly of his or her own opinion and spend lots of time in “broadcast mode” rather than “receive mode.” Conversely, key members of the leadership emulated a style that offered repeated good examples of reaching out to experts and listening carefully to qualified advice (S&F principle six; C&K principle two).

As mentioned, building the new Woodrow Wilson Bridge was a highly complex undertaking from a technical standpoint. Creating a “signature” structure takes many technical experts, and their advice needs to be given full weight. Likewise, the project afforded many opportunities for construction contractors to exercise ingenuity in selecting construction means and methods. The owner’s project leadership team consciously recognized that good ideas would come from the technical experts and the construction contractors, not just from themselves (F&U principle two, C&K principles eight and nine). Here are just two of many possible examples where this insight reduced conflict on the Wilson Bridge project.

In addition to the technical experts, the project gained much value-added assistance from having an expert public relations firm as a subconsultant to the GEC. The PR firm helped shape the project’s message to the public about progress and about the temporary impediments that were necessary for progress to occur. They were skilled in working with print and electronic media reporters, cultivating relationships that brought much positive yet rightfully earned coverage. (They practiced insight five
Keeping the public fully informed with timely information was creative and helped capture the public’s imagination, thus winning friends for the project, in ways that no solo project manager could be expected to dream up. That the Woodrow Wilson Bridge project leadership reached out and actively used these communication experts fostered a relationship based on mutual respect for all members of the project and helped create and maintain a nonconfrontational climate.

Another example involved solving quality control problems in production of precast concrete V pier segments. Except for the bascule piers (which were cast in place), the V piers supporting the new river crossing are made up of individual concrete blocks, strung together and tensioned like beads on a necklace. These individual blocks have complex shapes and must be formed precisely within incredible tolerances in order to match correctly with their neighbors. Some 1,076 individual segments needed to be produced. Both the Maryland and Virginia approach span contractors initially encountered difficulty casting these precast segments satisfactorily. Most of the problems resulted in surface imperfections, where patching had to be done to present a pleasing appearance. The solutions to these quality problems could not come from the top down; such an approach would likely have put the wrong people in place to make decisions and also create animosity. Instead, the workers and inspectors closest to the process collaborated and shared their ideas on how to get a better end product (C&K principle two, F&U principles two and three), with fewer cosmetic problems. Working as a team, they identified many small process improvements that collectively resulted in much-improved segment quality. Their on-the-site-level expertise prevented concrete segment quality from becoming a source of conflict, and this expertise was not something the manager could have furnished (F&U principle three, C&M principle one).

**Insight Seven: Recognize Show-Stoppers Early and Take Action**

One essential characteristic of megaproject leadership is the combination of vigilance for trouble and propensity for action. Paying attention to potential problems by encouraging everyone to focus on “surprises as opportunities to learn” is a hallmark of early warning systems that has been honed to a fine art through this project (C&K principles nine and ten). Neither vigilance nor action alone is sufficient; together they are the secret to keeping a project moving forward. Conflict often arises when a construction project is stalled; a contractor’s fixed costs continue to mount during any forced work stoppage, and there are no productive earnings during the...
period to offset them. Claims—involving often-contentious computations of overhead allocation—are the usual result. Claims are often the focus of protracted legal battles.

An especially worrisome show-stopper arose on the Wilson Bridge project soon after bridge superstructure construction started. Late in 2003, someone discovered water in the foundation post-tensioning (PT) ducts. The PT ducts are long metallic tubes, each about eight inches in diameter, embedded as loops deep into the concrete foundations below the surface of the river. High-strength wire strands would pass through the PT ducts and be tightened, forming the “string” holding the “necklace beads” in place. The PT ducts were supposed to be dry and watertight; otherwise water in the PT ducts could cause the high-strength wire strands to rust.

At first, everyone hoped the water found might be just rainwater or condensation. But the water would quickly return after being pumped out, so clearly river water was somehow getting into the PT ducts. It would be hard to imagine a more far-reaching show-stopper on this project. Neither the precise cause nor a good solution was evident, and six active major contracts spending collectively almost $400,000 per day were poised for delay.

To recover, the GEC construction management team, led by the construction manager (CM) and the area engineer (AE), exercised its propensity for action. They quickly surveyed the professional literature but found no ready solution there. Then the CM had the idea that the technology used to stop water from leaking into sewers might be adapted to meet this need. He pursued one option, which didn’t pan out. He and the AE brainstormed another possible strategy: using a pumpable sealing fluid such as bentonite slurry; but this too proved unsuitable. A regional foundation waterproofing and repair company (Superior Grouting Services) with an inventive owner was recruited. The company owner and assistant resident engineer came up with the equipment and procedures to adapt Superior Grouting’s methods to this task. They introduced a gelling grout into the PT ducts under pressure, forcing it into any tiny cracks where the water might be coming in. Because the cured grout was the consistency of Jell-O, the unneeded grout could be cleaned out from the circular duct cross-section using water jet and vacuum equipment at Superior’s leisure, allowing Superior to work on off-shifts and stay out of the bascule contractor’s way. The excess grout was captured so none of it got into the river. The ducts were tested after grouting and again before installing strand, and they remained watertight.

The total cost of this repair effort was about $270,000—far less than the impact of one day’s total project shutdown. Besides coming up with the idea
and finding someone clever to implement it, the biggest challenge proved to be persuading the oversight bureaucracy that the grout itself would not cause an adverse effect. Happily, there was a body of literature and working experience with the material to furnish persuasive evidence. The important lesson is that with a healthy set of relationships, a propensity to incorporate creative problem solving makes vigilance and action more effective. Likewise, if framed in a problem-solving manner, conflict is good as it becomes the mother of invention, innovation, and ingenuity. This is also a shining example of insight two (Prevent Counterproductive Behaviors).

Had this show-stopper not been recognized and swiftly acted on, the conflict climate on the Woodrow Wilson Bridge project would have been vastly different. It would have been quite normal, upon discovering the water leaks, to ask, Whose fault is this? The typical expectation, in less cooperative cases, is to make decisions on the basis of avoiding exposure to litigation or incurring lost revenue. The relative absence of that counterproductive mind-set and defensive question here let everyone focus on finding a creative solution.

**Insight Eight: Step Outside the Box**

The PT duct story is also a good example of outside-the-box thinking. Willingness to experiment using an existing answer in a creative way to solve a new problem is an important characteristic of effective leadership. More fundamentally, insight eight refers to a willingness to challenge assumptions—what can be done, what will work, and so forth.

An excellent example of stepping outside the box, and one with a very high-value benefit, was the Northern Access Road. As Outer Loop construction neared completion in spring 2006, the construction contractor for the Maryland approach span asked the owner and GEC engineers if he could construct the new Inner Loop approach span using the old bridge as a work trestle. Doing so required obtaining permission to construct a temporary access road along the margin of an environmentally sensitive area. A number of stakeholders all had a voice in this decision: Federal Highway Administration, National Park Service, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, Maryland Department of Environment, Maryland Department of Natural Resources, and the Chesapeake Bay Critical Area Commission.

Any of these stakeholders saying no could have prevented construction of the Northern Access Road and forced the contractor to build the new Inner Loop span as conceived, working from barges in the river.
the GEC environmental manager to ask their permission was outside-the-box thinking, because the answer had been no not once but several times before. The project environmental team had sought permission to extend the allowable limits-of-disturbance to the north during negotiations over the original permit terms. The answer characteristically had been not just no, but “Hell no!” Extending the limits would intrude into an area marked as a bald eagle sanctuary, and it would involve cutting down a healthy swath of existing vegetation. But the GEC environmental manager and his team recognized that the circumstances were different this time, and they were emboldened to present the request again. By listening to agency concerns and finding solutions to known impacts (S&F principle three), the group zeroed in on common interests and concerns and found a satisfactory joint solution (F&U principles two, three, and four; C&M principle one; S&F principles one and two).

At the end of the day, all of these stakeholders agreed that the idea was a good one, and it went forward. Doing so was a great boon to construction; it shortened the schedule while simultaneously improving quality and safety. It was also a boon to the environment, because it avoided the need for dredging six acres of the Potomac River bottom for barge access, preserving a large area of delicate and ecologically important underwater grasses. The stakeholders said yes in a timely way for three reasons:

1. The idea had tangible benefits for the environment (F&U, principle five)

2. The GEC environmental manager and the Woodrow Wilson Bridge project environmental team had earned the stakeholders’ confidence that the project would keep its commitments (see insights one, three, and five, and also S&F principle five)

3. The project team was willing to step outside the box and ask the question one more time (C&K principle two)

It didn’t hurt that the bald eagles had decided to take up residence right in the midst of the project instead of staying in their designated sanctuary, nor that the existing vegetation turned out to be largely kudzu vines and other invaders. The Endangered Species Act, which could have been the vehicle for a major show-stopper, was not invoked. Collective understanding and cooperation, based on trust and goodwill (see insight two), prevented a major conflict from erupting.
Insight Nine: There Will Be Technical Problems

This insight is a close cousin to insight six (the Manager Is Not Smartest About Everything). In the course of a long, expensive, and highly complex megaproject, technical issues are sure to arise. These technical problems must be addressed with technical analysis and answers commensurate with their nature, not just with seat-of-the-pants judgments. Once again, this bears on the conflict climate. If decisions are based on sound technical opinions, they are easier for everyone to accept than if they are based on, “My opinion counts more than your opinion.”

Decisions based on science are typically framed in rational ways following the scientific method, and in a climate of high trust they are more likely to be acceptable to the parties. We have learned firsthand from other projects that when the trust level is high there is a prevailing sense of giving other parties the benefit of the doubt. Elsewhere, we have worked on projects where science-based challenges have become acrimonious debates and did not lead to consensus. This is usually due to divergent starting values and other disagreements on how to frame the problem. The culprit is typically tied to low trust and exposure to risk (Ozawa, 1991). If conflict is present and results in stressed relationships, even sound scientific reasoning can be rejected because of faulty human judgment. This typically results in making fundamental attribution errors where people tend to misconstrue other parties’ motives (Jones and Davis, 1965). This is a predictable psychological process and is seen in many protracted public disputes. It can manifest in numerous ways: name calling, challenges to authority, challenges to other parties’ legitimacy or expertise, gossip, labeling others in unflattering ways, casting blame, avoiding responsibility, deliberately reducing communication as a misguided means of protecting oneself from exposure to risk, and other maladaptive reactions. Such a combative environment often leads a party to try to defeat the other side. In other words, the prevailing sense is, “It’s the other guy’s fault.”

When conflict intervention is introduced within acrimonious settings like these, the parties can still experience difficulty in reestablishing a modus vivendi thanks to lingering feelings and perceptions. This can produce a sense of cognitive dissonance in the parties (Festinger, 1957.) It is therefore critical, from the outset, to maintain trust (insight one), prevent counterproductive behaviors (insight two), keep everyone informed (insight three), and create and maintain critical friendships (insight five) to deal effectively with technical problems. The interesting finding here is that the human factor elements, as indicated by the insights above, have a direct impact on
management and resolution of the technological and scientific challenges, and that pure rationality appears to fall apart in their absence.

One of the thorniest technical problems the Woodrow Wilson Bridge project encountered stemmed from simple human error. Someone—reportedly an experienced ironworker—read the plans wrong and started installing reinforcing steel in the bridge deck overhang without including all of the transverse steel required in the second layer of bars. The GEC inspector did not catch the error the first time it happened, and the error was replicated several times over (under the “do it just like the last span” principle). When the error was finally recognized, the contractor readily acknowledged that it was his fault, and he awaited the owner’s instruction. A seat-of-the-pants judgment would have been “Rip it out!” However, doing so would have been costly to the contractor (on this partnered job, a concern to the owner as well) and costly to the owner (in terms of schedule delays, whether or not the ripple effect on adjacent contractors was paid for by the owner or by the contractor who made the error).

This technical problem ultimately demanded a technical solution. Bridge design engineers were brought in, and they determined that the missing reinforcing steel could be compensated for by increasing the number of reinforcing bars in the adjoining bridge parapet wall and still meet design standards. This solution resulted in minimum rework and was adopted to everyone’s great relief. This approach to seeking a mutual gain, rather than merely punishing the people who created and allowed the mistake to occur, is also a prime example of insight eight (thinking outside the box).

**Insight Ten: We All Succeed Together**

The last leadership insight concerns sharing success. Senior leaders on the project made a concerted effort to recognize the contributions of team members, often using the weekly projectwide teleconference call as a bully pulpit to ensure that credit was acknowledged publicly. People like to be thanked for doing a good job, and it is too easy in a fast-moving environment to forget to say “Thank you.” A key feature of the formal partnering program on the project involved including a tally of successes as the final agenda item at each periodic partnering meeting.

Success sharing in megaproject construction, however, means more than maintaining morale through good cheerleading. The senior owner leaders understood that the construction contractors (and their subcontractors) also needed to succeed for the entire enterprise to thrive.
Sometimes lip service is paid to this concept at partnering kickoff workshops; the Woodrow Wilson Bridge Project was confronted with a major challenge that presented MSHA and VDOT with a stark choice of living up to this ideal or not.

In 2005, the market price for all types of steel began to escalate dramatically, driven by a hot global economy and emergence of strong demand from China. Some commodities in transportation construction contracts, such as asphalt, routinely have price escalation clauses. Steel generally is not priced with an escalation clause, and the contractual risk of steel price increases at the Wilson Bridge lay squarely in the laps of the construction contractors. However, the owners recognized that this spike in prices was unprecedented and so severe that it had the potential for driving steel fabricators out of business. If this had happened and stalled a prime contract, delays to interfaces with adjacent contracts could have cost the owners dearly. Instead of letting this happen, both owners arranged quid pro quo contract modifications to provide fiscal relief to keep the steel suppliers from failing (S&F principles three and four). Staff support from the GEC validated the contractors’ documentation and established a verifiable basis for making compensation, as well as identifying the contractor schedule concessions needed for a fair quid pro quo. VDOT and MSHA adopted these changes and in so doing protected the program from delays and ripple-effect costs that would have been incurred had one or more key steel fabricators suffered a business failure.

In this way, both VDOT and MSHA lived up to the ideal that shared success was needed for the entire enterprise to thrive, and the result—a project that is on time, on budget, and virtually free of conflict—is testament to the wisdom of their doing so.

Discussion

The Woodrow Wilson Bridge megaproject demonstrates an instance where management of complex public construction projects has evolved over the last two decades to incorporate many basic conflict resolution principles. The fact that so many of the insights gained from this particular construction project closely match these principles is all the more informative of the common sense and basic values of collaborative problem solving that result in mutual gain. On a humorous note, when mentioning the overlaps in the literature and actual activities it is not unusual for construction industry leaders to say to us, “Oh! So that’s what you call what I do.”
Table 2 shows the connection between the practical leadership insights described here and basic conflict intervention principles as well as the common elements that bind them together. This part of the discussion focuses on the common elements. It is clear that the managers of the Woodrow Wilson megaproject understand the basics of principled negotiation and recognize that trust is the critical element to maintain. Proceeding from a basis of trusting one’s counterparts’ personal integrity, the introduction of various problem-solving and decision-making strategies can more easily commence.

The focus on preventing counterproductive behaviors (insight two) recognizes quite a few principles: making full disclosure, which is also a reflection of the parties’ character; creating and maintaining the subsequent transparency of communication in both content accuracy and means of actual transmission; and timely conveyance of information. These sound like common sense, but the Woodrow Wilson Bridge shows that even under the most supportive leaders, who promote collaborative problem solving and managed risk taking, some communication mistakes occur (insight seven). However, instead of becoming defensive and engaging in escalatory behavior that accelerates the conflict spiral, people onsite collaboratively considered creative ways to solve the problem. The key lesson here is that creative thinking is less likely to be considered—much less engaged—if everyone is in the process of reducing exposure to litigation.

Individuals’ personal skills, tactics, and strategies are not enough to lead a successful megaproject; nor is the use of problem-solving processes alone. Both skills and processes have to fit together within the framework of a system of managing decisions and the subsequent resolution of issues. Keeping senior managers involved recognizes the layers of decision making and when and where specific issues are to be addressed (insight three). A coherent system facilitates faster identification of issues for the correct individuals to address them early, to either prevent their occurrence or, if they do arise, effectively manage their resolution. The key is to know precisely how the dispute system is constructed and to make use of it via the issue resolution ladder. One mantra that can be employed here is, “Use the issue resolution ladder and everything will be OK.” Another mantra, appropriate for those even more confident in their problem-solving ability, is, “Sending an issue up the ladder is a sign that we failed to solve it here. Let’s try harder.” This second approach has value, but it always flirts with violating insight three. In any case, Wilson Bridge project leaders encouraged use of the system and ladder, and this reduced the perception that dealing with problems leads to exposure to risk. Likewise, using the
# Table 2. Comparison of Experience-Based Insights to Principles Espoused by the Literature

<table>
<thead>
<tr>
<th>Insights Developed from the Project</th>
<th>Principles from the Literature</th>
<th>Common Elements of Insights and Principle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insight 1 Establish and Maintain Public Trust</td>
<td>S&amp;F: 3, 5, 7 C&amp;M: 1 C&amp;K: 7</td>
<td>Principled behavior–tactic and strategy</td>
</tr>
<tr>
<td>Insight 2 Prevent Counter-productive Behaviors</td>
<td>C&amp;M: 5 C&amp;K: 1, 4</td>
<td>Full disclosure, transparent communication, quick and precise feedback</td>
</tr>
<tr>
<td>Insight 3 Keep Senior Management Informed</td>
<td>S&amp;F: 4, 5 F&amp;U: 3 C&amp;M: 1, 2, 3, 4 C&amp;K: 2, 3, 6, 8</td>
<td>Effective dispute system structure and function, transparency in communication</td>
</tr>
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<td>Insight 4 Make Decisions to Increase Bid Competition</td>
<td>S&amp;F: 2 F&amp;U: 4 C&amp;M: 1 C&amp;K: 2, 3, 6, 8</td>
<td>Cooperative competition, collaborative problem solving, atomizing complexity</td>
</tr>
<tr>
<td>Insight 5 Make Friends with Key Stakeholders</td>
<td>S&amp;F: 4, 5, 6 F&amp;U: 5 C&amp;K: 4</td>
<td>Critical to create and maintain healthy relationships</td>
</tr>
<tr>
<td>Insight 6 The Manager Is Not Smartest About Everything</td>
<td>S&amp;F: 6 F&amp;U: 2, 3 C&amp;M: 1 C&amp;K: 2, 3, 6, 8</td>
<td>Introspection, sense of belonging to something big, awareness of others’ abilities–providing due recognition, respect, appreciation</td>
</tr>
<tr>
<td>Insight 7 Recognize Show-Stoppers Early and Take Action</td>
<td>C&amp;K: 9, 10</td>
<td>Early warning systems, actively searching for potential challenges, transparency in communication, acting in an honest and trustworthy manner</td>
</tr>
<tr>
<td>Insight 8 Step Outside the Box</td>
<td>S&amp;F: 1, 2, 3, 5 F&amp;U: 2, 3, 4, 5 C&amp;M: 1 C&amp;K: 2</td>
<td>Promotion of creative problem solving, reframing problems as puzzles to be solved and teachable moments</td>
</tr>
<tr>
<td>Insight 9 There Will Be Technical Problems</td>
<td>S&amp;F: 3, 4</td>
<td>Recognition that rational technical and scientific challenges can be impacted by irrational human factors</td>
</tr>
<tr>
<td>Insight 10 We All Succeed Together</td>
<td>S&amp;F: 3, 4</td>
<td>Interdependency must be attended to achieve mutual gains</td>
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</table>
system and ladder, without seeing it as a risk, also encouraged creative thinking.

Mutual gains occur when people decide that the best way to get what they want and need can occur when they help others get what they want and need too. This requires more than integrative thinking; it requires individuals to see that they are a part of something bigger, something special, something important (insight five). The Woodrow Wilson Bridge is a prime example. In taking situations that could lead to a lose-lose outcome and reframing the issues by dismantling major issues into smaller, more digestible bites, many parties could take part in finding solutions (insight eight). This creative thinking produced many winners. The “atomization” of complex issues often allows individuals and organizations the opportunity to reconsider their strategy and their involvement or commitment to proactively engage others.

Another element in common between insights five and ten is recognition that all parties in the project are interdependent. This realization means that when things go well everyone enjoys the benefits, but when things go badly everyone feels the cost. There are two related points to be made. Creating and maintaining healthy relationships with key stakeholders, both personal and professional, helps when it comes to maintaining contractual obligations (insight five).

Another leadership insight born of practice within a conflict setting is that individuals need to take stock of their own capabilities and competencies (insight six). Individuals need to recognize and respect the knowledge, skills, and abilities of other parties and appreciate their contributions from an individual and a professional perspective. This can happen only if we first realize our own limitations, for without that critical introspective examination we are doomed to let our ego drive our actions, which can lead to serious conflict.

Creative thinking is best expressed in an environment conducive to collaborative problem solving. Reframing problems into opportunities to explore new options and construct new solutions is an art form in and of itself. However, to have a leadership team that makes this cognitive interaction a major part of the operation is a rare step, especially in such a highly visible, high-stakes public project.

Finally, there are a number of unique ideas expressed within the leadership insights that are severable from the principles coming from the conflict resolution literature and from which the conflict resolution field can learn a great deal. Recalling the points we make about Mayer at the beginning of the article, we have to ask if the field of conflict resolution is
ready to explore or challenge some basic assumptions of who we say we are and what it is we say we do. Many of the unique leadership insights described here revolve specifically around knowledge and manipulation of substance issues yet are, unsurprisingly, managed using effective human factor skills within healthy relationships. These substance-focused leadership insights do not fit so well into any of the principles outlined in the conflict resolution literature. This may be for two reasons. First, the management leader is inside the conflict and needs, understandably, to act as a primary party. Second, most of the literature dealing with conflict intervention employs analytical methods and points of engagement that focus on such things as structures, systems, and processes and not so much on the actual substance of the dispute. The literature, one may argue, is other-focused. When it comes to conflict “management,” the characteristics and traits of intervention espoused by members of the conflict resolution field focus on things such as neutrality and impartiality, conversely the roles we have identified as effective that, regardless of periodic critical examination, drive all our practice-oriented principles. Even so, it is clear that a disinterested third party can and likely should act differently than a second or primary party.

However, this article now asks the reader to consider what it is that other nonconflict resolution participants do that is effective in framing and managing complex conflicts. More important, what can we learn from this exploration? We have learned that many primary stakeholders (disputants) have made clear their preference for conflict interveners who have some substantive knowledge or expertise in the matter being contested. In other words, if participants want conflict intervention experts who possess and can make use of substantive knowledge, then we should figure out how it may be possible that such a need can be incorporated into “who it is we say we are and what it is we say we do” as conflict resolution practitioners. This case study reinforces the notion. Indeed, many specialized areas of conflict intervention that are essentially closed to the general field of practice require expert inside knowledge (examples are insurance industry arbitration, securities, and construction dispute resolution boards) for a person to act as a facilitator, mediator, or arbitrator.

Comparing independently derived, field-based leadership insights, such as the ten presented here, to conflict resolution principles creates questions. Does the generally understood role of conflict intervener preclude us from engaging in other aspects of conflict prevention and management? Are project leaders in the construction field, who employ many
of the principles of conflict intervention espoused by the literature, side-
stepping a barrier (neutrality) that the field places in its realm of activity? Can we take their lead and delve into areas once considered taboo? Mayer (2004) as well as Jones and Brinkert (2008) not only ask similar questions but demonstrate that the knowledge we possess can be put to greater use in modified roles and new and hybrid processes. This is a serious area of inquiry and is reintroduced here because the 374 lessons from the Woodrow Wilson Bridge megaproject, which are subsumed under the ten leadership insights within this article, have been generated by individuals in the construction industry without assistance or coaching from conflict resolution consultants or practitioners. It is startling to see the similarities, and just as important to recognize the unique data patterns that should make us pause. They may point the field to new areas of practice as well as new uses for skills we already possess, or the need to further develop and broaden our skills to meet evolving challenges being made by consumers of conflict intervention services.

References


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