

## THE VALUE MANAGED MEDIATION OF CONSTRUCTION DISPUTES

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### ABSTRACT

This paper examines the characteristics of mediation as one alternative to litigation in the resolution of construction industry disputes, examines the similarities between mediation and value analysis/value management (VA\VM) processes, and proposes four areas of future research in the application of VA/VM methodology to dispute resolution and prevention.

### INTRODUCTION

I am interested in describing a timely and powerful application of value analysis and value management (VA/VM) methods; specifically, the application of these methods to the mediation of disputes in the construction industry.

The application is timely because the costs of litigating such disputes have already reached alarming proportions and the volume of such cases has placed enormous demands on the judicial system. Any alternatives to litigation that can preserve resources deserves to be fully explored.

The application is powerful because it complements theoretical and applied research in dispute resolution. To illustrate this point, I draw on the writings of four negotiation\mediation practitioners. Further, the application is powerful because the methods of both disciplines are so readily capable of extension to a variety of construction dispute prevention approaches already under study. These include constructibility reviews, the re-examination of risk allocation and incentives, partnering, and on-site dispute review boards.

As an architect, my experiences with Value Analysis (VA), forensic investigations, litigation, and alternative dispute resolution have been substantial, concurrent, and intertwined

over the last 17 years. For 10 of those years I was associated with professional services construction management firms and for 7 years I served as vice president of one of them. During the 1980's, as the frequency of my involvement in construction disputes as a neutral (arbitrator or mediator) increased, I began to consider the potential connection between VA/VM and dispute resolution for two reasons: the high costs (not all of which were usually recognized and calculated) associated with litigation and, to a lesser degree, arbitration and the clarifying power of function analysis. As a result of continued training in VA, arbitration, and mediation as well as association with VA practitioners with substantial non-construction applications experience and neutral practitioners with mediation experience, the key links between disciplines became clear: both, in VA terms, depend on a facilitator and both place equal stress on the order and importance of information, function analysis, and creativity.

The immediate catalyst for this paper is an article written by Willingham which uses as an example a comparison between the VA job plan and the processes of the legal system. Her paper also has a particularly challenging and provocative title: "Value Analysis: Universal Applicability, Limited Usage."<sup>1</sup> I can only hope that this paper is a convincing illustration of that universal applicability and that future development and implementation will extend the current limits of usage.

### LITIGATION AND ALTERNATIVES

On any given construction project, disputes among the various parties are virtually guaranteed. In large measure, this is because the construction industry is not particularly well integrated and the opportunities for conflict between the many participants at all stages of the design and construction development are numerous, even on relatively small projects. Litigating these disputes before a judge and jury is expensive.

Legal costs are not always predictable and the parties do not always anticipate or quantify the time and costs directly attributable to tying up key staff members in discovery, hearings, depositions, preparing or answering interrogatories, meeting with lawyers, testifying, and reconstruction of project files. Litigation also risks irreparably damaging the relationships between the parties and causes them to substantially relinquish control over the outcome of the dispute. Alternative forms of dispute resolution (ADR), intended to reduce or eliminate some of the undesirable consequences of litigation, have come into more common use. These alternatives, listed in order from least to most control of the parties over the outcome, include:

- arbitration
- summary jury trial
- mediation-arbitration (med-arb)
- mini-trial
- mediation
- conciliation
- negotiation

Arbitration, a quasi-judicial process conducted before a panel of neutrals, is the most time-tested ADR approach. Arbitration clauses are included in American Institute of Architects (AIA) standard form design and construction agreements. Over the period 1980 through 1990, annual construction arbitration case filings with the American Arbitration Association (AAA) increased from 2,831 to 5,440. The total value of claims and counterclaims filed in 1990 totaled \$801 million.<sup>2</sup>

Negotiation, at the other end of the ADR spectrum, is a process involving the parties directly and jointly in seeking a mutually acceptable solution without outside assistance.

Conciliation is a process whereby a third party brings the parties together and assists in maintaining lines of communication between them as they negotiate a settlement.

Mediation is a facilitated negotiation process. A neutral, selected by the parties, provides assistance with issue definition and development of settlement options. The facilitator, process, and agreement however, are all fully under the control of the parties. In some jurisdictions, mediation is mandatory prior to the case being referred to a judge and jury. AAA reports that in 1990 the number of construction cases referred to it for mediation totaled 171 (almost double the 1988 filings) and that 80% of these cases were settled.<sup>3</sup>

Mediation, which does not require the parties to relinquish control over the outcome and which uses a neutral to actively facilitate negotiation, will be the primary focus of this paper.

#### A TYPICAL DISPUTE

The following is an abbreviated description of a dispute resolution where the ADR approach changed during the course

of meetings between the parties and the neutral. This particular case is probably my first effort (albeit unintended) at mediation.

Several years ago, I was asked by two attorneys, representing a homeowner and general contractor, if I would arbitrate a dispute between their respective clients. I was expected to review the claims of the parties together with the evidence and render a judgement in the form of a written decision or award.

#### The Claims

The dispute, totaling less than \$50,000, arose as a result of the contractor's alleged breach of contract and poor quality workmanship. The owner had withheld not only 10% of the total contract value but the last two progress payments as well. In addition, the owner had denied the contractor access to the site and therefore the ability to complete the approximately 15% of remaining work. The contractor had counterclaimed for the full value of the 85% of the work he had completed, the full value of extra work added by the homeowner, and the damages resulting from denied access.

#### The Contract

The contract itself was a purchase order agreement with attachments showing kitchen renovations and an 800 square foot recreation room addition, both in plan only. Neither party had engaged a design professional. A building permit had been issued by the local building official on the strength of the homeowner's representation that the plans for the project had been prepared by the homeowner himself.

#### The Problems

A site visit revealed, among other things, an addition of questionable structural integrity, leaking windows, and a haphazard arrangement of otherwise good quality kitchen cabinets. At the on-site arbitration conference, the parties took the first two hours to repetitively state their positions and demands as well as ventilate emotions. I concluded that the absence of adequate drawings and specifications was the origin of most of the problems. In this, the owner and the contractor seemed to share the responsibility for not reducing an oral understanding to a less ambiguous form. The additional storage and work space in the kitchen, for example, had been provided as indicated in the sketch attached to the contract but, because the arrangement had been insufficiently studied and in plan alone, conflicts, which arose during construction, quickly nullified the original sketches. Most of these conflicts could have been avoided if the renovations had been much more thoroughly studied and documented. In fact, most of the extra work claimed by the contractor had been done to resolve these conflicts and these ad hoc decisions seemed to explain the somewhat random appearance of the new kitchen layout.

The contractor had chosen the specific windows. The

missing or improperly installed flashings, required to divert water away from the head of the window units, involved a straightforward detail that should have been known to the contractor and his window installer. The overall improper fit of the windows, resulting in excessive air infiltration, was also directly related to defective structural design.

The owner had wanted a "cathedral ceiling" in the recreation room and the contractor's solution, adapted from another job without benefit of a structural engineer, neglected to account for the roof structure pushing out on the exterior walls. Signs of distress were visible in interior sheetrock and exterior siding.

#### From Demands to Motivations

As I walked around, surveying the problems and developing the outline of an arbitration award, I listened more carefully to the changing tone of the conversation between the owner and the contractor. I had asked many questions in the course of the meeting. These questions covered such issues as contractor involvement in initial planning and costing, details of construction, owner's expectations, construction planning, and municipal reviews. In more than a few instances, the answers represented information and disclosures new to one or both of the parties.

Gradually, the rhetoric ceased and conversation turned from demands to motivations. The owner and his wife, it appeared, did not share a common vision of how the renovations and addition should appear when completed and both had independently instructed the contractor to make "slight" changes as the work progressed. The contractor, not wishing to offend either, had attempted to strike a compromise without disclosing the conflicting instructions. The owner had no intention of remaining in the house after the work was finished. He viewed the improvements as a way of increasing the resale value of an older home and had already listed the property with a realtor. The contractor had bid the job low to get work in a declining and highly competitive market. He was a skilled carpenter but new to the business of operating a general contracting firm. He had seriously underestimated the amount of time required to handle the administration of the firm and had not recruited and trained a field superintendent for this particular job. Though he desperately needed the small profit that this job was expected to generate, he was more interested still in getting referral work from satisfied clients.

#### Structuring the Settlement

After lunch, the three of us prepared a list of tasks required to complete the job and a time-scaled schedule. We focused on the necessity, cost, and schedule impact of each item - not on liability. Included in the list of tasks was a final inspection and

approval by the local building official. We decided that such approval was unlikely in view of the structural problems. Sale of the house was impossible until these problems were resolved. Prompted by these realities, we sketched out a number of alternatives that appeared structurally sound and aesthetically acceptable and the owner agreed to hire and pay for the services of a structural engineer to detail the design for the remedial work. The contractor acknowledged his responsibility to correct the windows and we added this work to the task list immediately following the structural repairs. The owner and his wife reviewed their requests for work in the kitchen and decided that, in the interest of timely completion, very little extra work was really required and that, since this work was never a part of the original contract, it was their responsibility to pay for it. The owner was able to select additional cabinets from the contractor's stock. He gave them a good price on the units and cleared valuable space in his warehouse at the same time. As each decision was reached, it was carefully drawn and noted with particulars on size, model number, color, and the like. Not all decisions were easy, but by dealing straightforwardly with the needs and interests of the parties and actively seeking to multiply options, reconciliation was eventually reached on each and every point.

By dinner time, the owner and contractor had all but completed a detailed agreement on what needed to be done, what it would cost, who would pay, and when the work would be completed.

An early morning meeting the next day was required to put the finishing touches on the last few details of the written agreement, signed by the parties. The work was subsequently completed, the contractor paid, and the house sold to new owners.

Obviously I had failed at arbitration. I did, however, learn some valuable lessons about mediation as a method of resolving conflict. This dispute was resolved, first and foremost, because the parties wanted it resolved and were willing to work together toward that end. To some extent, this mediation was an "accidental" one. Certainly, it would be of greater benefit for such a process to be deliberate and the following section takes a closer look at the structure behind the mediation process.

#### MEDIATION

More formally stated, mediation is a process in which a neutral party assists one or more disputants to reach a voluntary settlement of their differences through an agreement that defines their future behavior. Cooley<sup>3</sup> and Moore<sup>4</sup> have each developed detailed descriptions of this mediation process; Cooley in eight phases and Moore in twelve stages. These may be grouped and compared in the following manner:

Cooley-Eight Phases

Moore-Twelve Stages

Group I

1. initiation
2. preparation

1. initial contacts with the disputing parties
2. selecting a strategy to guide mediation
4. designing a detailed plan for mediation
5. building trust and cooperation

Group II

3. introduction
4. problem statement

- 3a. collecting background information
6. beginning mediation session
7. defining issues and setting an agenda

Group III

5. problem clarification

- 3b. analyzing background information
8. uncovering hidden interests of the disputing parties

Group IV

- 6a. generation of alternatives

9. generating options for settlement

Group V

- 6b. evaluation of alternatives

10. assessing options for settlement

Group VI

7. selection of alternatives

11. final bargaining

Group VII

8. agreement

12. achieving formal settlement

The activities in Groups II, III and IV are of particular interest. Group II deals with problem statement and information gathering, Group III with problem clarification and uncovering hidden interests, and Group IV with generation of alternatives and options.

What, if any, connection exists between problems and interests? Roger Fisher and William Ury, of the Harvard Negotiation Project, provide insight into this question and introduce strong arguments for principled negotiation (or negotiation on the merits) as opposed to positional negotiation. (Since mediation is enhanced negotiation, these observations apply equally to the mediation process.)

Dispute resolution by positional bargaining, they argue, results in adversarial relationships, win-lose expectations, demands for compromise and concessions, being hard on people (rather than problems), distrust, pressure tactics, and a search for the single best answer. By contrast, principled negotiation, which focuses on motivations or interests, rests on four propositions:

- Separate the people from the problem.
- Focus on interests, not positions.
- Generate a variety of possibilities before deciding what to do.
- Insist that the result be based on some objective standard.<sup>5</sup>

Fisher and Ury contend that interests define the problem and that reconciling interests rather than compromising between positions works because "..... for every interest there usually exist several possible positions that could satisfy it.....[and].....because behind opposed positions lie many more [compatible] interests than conflicting ones."<sup>6</sup>

Cooley and Moore's activities 6a. and 9., respectively, concerning the generation of alternatives and options, relate directly to Fisher and Ury's third proposition dealing with the generation of possibilities. In discussing the invention of options, the authors first diagnose the obstacles to the invention of options. These are:

- premature judgment,
- searching for the single answer,
- the assumption of a fixed pie, and thinking that "solving their problem is their problem."

Their prescription for avoiding each of these obstacles is to:

- 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 decisions easy.<sup>7</sup>

## MEDIATION AND VALUE ANALYSIS

Given this description of the mediation process, let us now look at mediation in comparison value analysis. First, a review of the essential characteristics of value analysis.

### Characteristics of Value Analysis

Fallon has observed that value analysis ".....regardless of name, location, or sponsorship, has three universal characteristics: (a) it improves value by studying the function rather than the structure of a product [or service], (b) it deliberately stimulates resourcefulness, ingenuity, and inventiveness, and (c) it begins with a formal information phase."<sup>8</sup>

### Mediation and VA Processes Compared

Returning to the mediation process descriptions advanced by Cooley and Moore and the groupings I have superimposed, it is clear that these two descriptions associate well with the value analysis job plan.<sup>9</sup>

Group I: Preparation

Group II Information Phase

Group III: Analytic Phase

Group IV: Creative Phase

Group V: Evaluation

Group VI: Presentation

Group VII: Implementation

In both process descriptions (after an initial preparation phase), mediation begins with a formal information phase.

To determine the nature of the analytic and creative phases, we must recall the principled approach put forward by Fisher and Ury. Positional bargaining is analogous to structural analysis; principled bargaining analogous to function analysis. The functions under study in mediation are the motivating factors and interests of the parties, not constructed solutions in the form of positions.

Fisher and Ury<sup>10</sup> have also developed an approach to inventiveness that certainly may be described as deliberate. Supported by recommendations on brainstorming, asking probing questions, and use of experts and facilitators, this systematic and intentional process is best illustrated by their four basic steps for inventing options.

**WHAT IS WRONG**

**WHAT MIGHT  
BE DONE**

II Analysis

III approaches

Diagnose the  
problem  
**IN  
THEORY**

What are poss-  
ible strategies  
or prescriptions.

Sort symptoms  
into categories  
Suggest causes.

What are some theoretical  
cures?

Observe what is  
lacking.

Generate broad ideas  
about what might be done.

Note barriers to  
resolving the  
problem.

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I Problem

IV Approaches

What might be  
wrong?  
**IN THE  
REAL WORLD**

What's done?

What are current  
symptoms?

What specific steps  
might be taken to  
deal with the problem?

What are disliked  
facts contrasted  
with a preferred  
situation?

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We refer to this as the "circle chart" and it is intended to be used in sequence (and iteratively if necessary) starting with (I) the specifics of the problem in the real world, (II) abstracting the problem, (III) suggesting what theoretically must be changed to remove the problems, and (IV) deciding what real world action might be taken to implement the theoretical solutions.

### CONCLUSIONS

From the preceding brief examination of mediation, it appears that facilitated principled bargaining (mediating interests rather than positions with the active assistance of a neutral) possesses the three universal characteristics of value analysis identified by Fallon. Additionally, the phases or stages of the mediation process appear to closely correspond in substance and sequence with the value analysis job plan. Finally, the tools and techniques used to assist the development of alternatives and options in mediation are similar to those used in the creative phase of the value analysis process.

Refinement of the application will depend on implementation and research. Four such areas of further study are described below.

1. Implementation of Function Analysis System Technique (FAST) to clarify interests. This could include using how-why logic in the analysis of one's own interests in a dispute as well as in the analysis on one's understanding of the other party's interests. Another approach could involve both parties in developing a joint FAST diagram, changing levels of abstraction or indenture as a way of reconciling apparently conflicting interests.

2. Development of models, appropriate to mediation. Cost and worth models used in value analysis of construction, are well developed. In dispute resolution, this is not currently the case. From a positional bargaining standpoint, the calculated damages in a party's claim are an expression of the cost model (delay costs, change order costs, and the like). Viewed for a principled bargaining perspective, interests may or may not have common measures.

3. Development of value analysis training session for mediators. The success or failure of a mediation depends on the skills and professionalism of the mediator. The one area where disputants most need a mediator or facilitator's help is in the generation of alternatives and options for settlement. The function analysis perspective of the VA methodology can assist the facilitator's skills in this option generation process.

4. Development of a value analytical approach to partnering, an accepted dispute prevention technique. Partnering is a term used to describe a meeting of the parties prior to the commencement of a major construction project for the purpose of candidly exploring all aspects of the design and construction

effort, identifying potential problem areas, and agreeing on measures for reducing or eliminating these problems. Actually the meeting could better be described as a retreat. It is intended to be held in an informal environment over a period of days and not merely hours. It is intended to establish positive working relationships between the parties at the very beginning of the project. It is also an appropriate opportunity for reaching agreement on dispute resolution procedures. Dispute avoidance, no less than dispute resolution, may well be aided by an analysis of function (interests) within the discipline of the VA job plan.

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