



# Errors in Social Judgment: Implications for Negotiation and Conflict Resolution

## Part 1: Biased Assimilation of Information

### Introduction

Negotiation, as Howard Raiffa points out in the title of his well-known book<sup>1</sup>, is both an art and a science. The equal weighting of these words in the title (not to mention their order) is interesting. Getting the problem "right" from an analytic perspective, correctly spelling out probabilities and decision nodes, assessing expected future value, discovering the potential for joint gains and logrolling in the underlying structure of the deal, is the "science" of negotiation, and a set of skills which must be mastered if one is to be effective in this domain. However, this is only part of the equation of success. One must also be able to read one's opponent, to correctly guess when they are bluffing, to assess whether or not a counter-offer will be effective, to tell when they are not being entirely candid. This is the "art" of negotiation, a difficult and almost ineffable set of skills to master.

Raiffa also talks about the difference between "description" (analyzing, understanding, and describing problems), and "prescription" (telling one party what do about the problem in a real-world context, so that a more favorable outcome results)<sup>2</sup>. In order to give ourselves and others good prescriptive advice, it is necessary to understand both what the "right" answers to the problem are, and what common pitfalls and errors may commonly occur. If we are unaware of errors we are making, we may never fully achieve success, no matter how hard we try to do things right. Thus in negotiation, we might study the deal very carefully, perceive all kinds of advantageous angles and opportunities, yet fail miserably in the actual negotiation because we inadvertently offend the other party due to some cultural misunderstanding, or we are unaware that our body language betrays our bluff, or, as we shall discuss below, because we have made incorrect use of the social information that is available.

When something goes wrong, the source of that error could be quite distant from the actual decision which went awry. There are at least three points in the management of social information which results in errors, which can be organized according to a general information processing chronology. First, we *receive* information from an external source. During this process, it is possible to distort the nature of that information through misunderstanding, bias, or lack of background knowledge. Second, we *process* the information, and run the risk of using incorrect decision rules to

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<sup>1</sup> Raiffa, H. (1982). *The art and science of negotiation: how to resolve conflicts and get the best out of bargaining*. Cambridge, MA: Harvard University Press.

<sup>2</sup> Raiffa calls this "asymmetrical prescriptive / descriptive research": The problem, as described, is true for *all* observers; advice, on the other hand, is specific to a *particular* party.

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*Professor Robert J. Robinson prepared this note as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.*

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analyze and understand it. Finally, we *apply* the social information in the form of conclusions we reach, and actions we take. Again, there is a risk of error due to flawed implementation strategies, or errors made earlier in this sequence. In the remainder of this piece, we will consider a class of errors in social judgment, called *biased assimilation of information*, in particular how this affects the conflict resolution and negotiation process.

### **Biased Assimilation: Getting The Answer You Are Looking For**

Incoming information is encoded as it is received by our brains -- it is marked as "important", "irrelevant", "highly suspect", etc. We tend, not unexpectedly, to later disregard information which was seen as incorrect or irrelevant when we received it, and are very much more likely to base our decisions on information marked as critical or highly relevant. All of this, is of course, as it should be. Thus if we are negotiating over the stock price of a company, and the *Wall Street Journal* has just given the company a glowing review, and at the same time, an unsubstantiated rumor from questionable sources is somewhat more critical, we would, in most instances, be well-served to weight the *WSJ* data more heavily, and act accordingly. However, we are not always so dispassionate and rational.

Biased assimilation of information is the inadvertent tendency to allow our motives, needs, and biases to distort the way in which we receive, process, and apply information reaching us, in such a way that we "stack the deck" in favor of a particular outcome. Below, we'll consider a few illustrative examples.

We are often asked to choose between alternatives in life. For example, when we go to college, we get the prospectus from each likely school, and attempt to compare the alternatives to decide as to which is better for us. Usually we have a pre-existing bias: we want to go to California, or the East Coast, or a specific school. In looking over the material from the various schools, we are searching for information which will rationalize our inclinations: we hope that reality will confirm that Harvard or Berkeley or Stanford is indeed the "right" choice for us. However, what if the prospectus from the University of Texas better matches our interests? How do we deal with information that makes the choice more difficult, rather than less difficult? And how does this affect the dynamics of negotiation?

#### **Example 1: Choosing a New Plant Site**

Jill Francis and Jim Smith sat across the table from one another, glaring angrily at the other. For the past two hours they had argued bitterly over the two proposals for the new plant site. As joint VPs in charge of Production, their decision would have to be ratified by the Board, but that would be a formality. The CEO had made it clear that the two finalists, located in Michigan and South Carolina, were both acceptable alternatives. Right now they needed a decision, and they had to make it by tomorrow. The staff had worked hard over the last few weeks, to bring all the diverse information to their desks in the form of these two proposals. Their usually pleasant relationship had turned into a difficult negotiation, and now an angry fight.

**Evaluating the Information:** Prior to the meeting, both Jim and Jill had taken several days to look over the proposals contained in the two folders. For both Jill and Jim, the two possible sites had started out as roughly equal in attractiveness, because in the end the projected operating costs were virtually identical. But things could change. What would happen in a year or more? What if energy costs went up? The large plant would incur a huge increase in heating costs in Michigan. On the other hand, South Carolina was vulnerable to periodic hurricanes, which could devastate production by destroying infrastructure, even if the plant was relatively unharmed. What about changes in tax laws? Environmental regulations? Each folder contained an assessment of each of these and other factors, but that's just what they were -- assessments. No-one could know for sure...

A few days before, Jill had sat down with the two folders. One of the reasons that this decision was so important to her was that she would likely spend the next 3-5 years at the plant. As a vertically-integrated production facility, the super-modern plant would be responsible for 80% or more of all the company's electronic component production in the USA. As someone who hated cold, she really wanted to go to South Carolina, not Michigan. The people there were so nice, land was so cheap ... but that was no way to decide either. Opening the files, she began to read. The familiar figures and

analyses flowed by, as she read the two files in parallel. To her surprise, she began to notice that with all the information together in this form, the comparison was not as close as she recalled. South Carolina had a number of subtle, but cumulative advantages. Labor was cheaper, long-term tax savings showed a projected 6% savings relative to Michigan, and construction projects slated to begin within two years would provide rail-links to much of the North-East, neutralizing one of Michigan's current advantages. In addition, the risk posed by weather disasters was negligible.

Jill read on with growing enthusiasm. South Carolina *would* be the plant's new home, as well as her own. She made several notations in the folders, and dictated a lengthy memo to her secretary. Thursday she and Jim would make their recommendation to the Board, and it hadn't even been that difficult in the end.

At around the time that Jill had sat down with the files, her colleague and co-VP, Jim, was doing likewise. Jim grew up in Michigan, his father being an engineer at GM, and he had many fond childhood memories of the Detroit suburb he spent his childhood in. Jim loved to ski, and had many friends and family in the area of the proposed plant. On the other hand, he had never been to the South, and did not much like the idea. Jim had about the same analytic insight as Jill, and as he read the two folders, he noticed that Michigan had a number of subtle advantages over South Carolina. The labor force was better educated, the infrastructure was better developed, and South Carolina was currently considering a new environmental package, which if passed, would kill the proposed construction site in that state. In addition, the proposed new rail-links were just too vulnerable to the political process, appropriations committees etc., and they might never get built. Further, the chances of major hurricane damage, although slim, could not be ruled out given the 40 years the plant was likely to be there. "No", thought Jim, "clearly the answer is Michigan".

Jim and Jill had meant to get together earlier in the week to discuss the details of the two sites, but both had discovered scheduling conflicts, resulting in this last-minute meeting. Neither had pushed very hard for an earlier date, since both were equally convinced that decision, although somewhat subtle, was also easy once the "relevant" facts were brought to light. To their mutual dismay and anger, once beginning the discussion, they discovered that the other was advancing a "dumb" option, and disregarding their own careful and insightful analysis. Somewhat bitterly, they realized they would have to postpone the decision several weeks, and order a new study. This was an unpalatable choice, since the decision was part of the construction critical path, and would potentially cost the company millions. Alternatively, the CEO might make a decision over their heads, making them look indecisive, and exposing their inability to agree. Glumly, they drafted the note to the Board requesting a further delay in the decision, and left for home -- neither offering to split a cab with the other.

**Analysis:** Did Jill and Jim do everything they could to get to the "right" choice? Clearly, they had a lot of relevant information. They had their staff put together two comprehensive reports, made themselves familiar with all the information therein, and then made a professional decision based on experience and intuition. Unfortunately, this was not enough. Jill and Jim, and their company by proxy, were victims of *biased assimilation*.

What is going on here? Are Jill and Jim "making" the decision come out the way they want? How? Well, the answer is yes, they are. Both have personal reasons for wanting to choose one state or the other. When someone has a predisposition between two choices, say, A and B, and they receive two pieces of information, one of which supports A, and one of which supports B, people will unduly weight the information which is consistent with their pre-existing bias, and devalue that which does not, with the result that after reading the two pieces, rather than being confused, they are more convinced than before that their initial inclinations were correct.. So Jill, who wants to go to South Carolina, counts cheap labor as important, discounts pending environmental legislation and weather dangers, and counts non-existent rail-links as built. Jim, who wants to go to Michigan, decides educated labor is more important than cheap labor, worries about hurricanes, and thinks that new environmental legislation is likely to get passed, and the rail-links are likely never to get built.

Neither Jill nor Jim are willfully distorting their decision process. They are merely *allowing their preferences to color their rationality*, without realizing that this is occurring. The human brain doesn't divide off "like" and "dislike" from what we like to think is a cold, unemotional decision

process. The brain considers everything, and comes up with a solution. Unfortunately, what is right for Jill or Jim, may not necessarily be right for their company.

### Example 2: Eagle Insurance

Another example illustrates both the biased processing and application of information. The biased assimilation phenomenon is not restricted to issues of subjective preference, like whether Michigan or South Carolina is a better site. In another example which takes the form of a negotiation simulation (*Eagle Insurance*) conducted with executive audiences, one side plays an insurance company, and the other the attorneys for a claimant. The two sides are negotiating over the size of the settlement for a loss which the client sustained due to the actions of an insured defendant. As part of their preparation, participants in the negotiation simulation are asked to assess the likely results of this dispute if it ends up in court, in particular the likelihood that a court will find for their side or the other, and what damages would be awarded if finding for the claimant was returned. Participants fill in these figures on a questionnaire prior to negotiating.

The results of this exercise are startling. *Despite the fact that both sides have identical information* about the nature of the case, and about recent court decisions in similar cases, the assessments differ wildly by role. Participants who were randomly assigned to the insurance company role on average believe that they court is far less likely to find for the claimant, and if it does, will award far smaller damages, than do the participants assigned to the role of attorneys for the claimant. It is important to be clear here: while it is both likely and tactically desirable to present a confident and assured pose to the other side, it is even *more* important to be accurate about the *true* likely outcome of any probabilistic situation. In *Eagle Insurance*, players, when asked to complete private assessment questionnaires about the likely outcome of the case, which they are aware will never be seen by the other side, and which specifically ask them to be as objective and accurate as possible, still greatly distort the likely outcome depending on the role to which they were assigned. It may seem incredible that the best predictor of someone's honest, private, probability assessment of a court victory and likely damages awarded is whether he or she has been assigned one role or another. The difference in the expected value of going to court often makes it worthwhile for the two parties to do so, even though in real life this is an extremely expensive business where one side potentially stands to lose big. A dispassionate reading of the facts of the case makes settlement very attractive to both sides, but unfortunately, in *Eagle Insurance*, and in life in general, facts are seldom evaluated dispassionately.

In *Eagle Insurance*, just like with Jim and Jill, the players are highly motivated to believe a certain point of view, and interpret information accordingly. Thus in observing the negotiation simulations, is often clear that the two sides have put a lot of credence in information that supports their position, and discounted that which does not. The attorneys for the plaintiff emphasize the sympathetic appearance their client will make in court, and hammer away with examples of large (but atypical) awards made in such cases. The insurance company representatives counter with statistics about other trials, and focus on minor culpability issues relating to the claimant's own responsibility for the loss. These are all fine arguments, but collectively, the players have come to believe their own lines more than is healthy<sup>3</sup>. More analytically, *when each side assesses its likelihood of winning, and the sum of the two probability assessments comes to more than 1.00, it is likely that biased assimilation of information has occurred*, and that a settlement will be harder to reach, the process will be more adversarial, and will be more likely to end in impasse<sup>4</sup>.

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<sup>3</sup> Ross & Ward (1995), have called this tendency to self-delude "optimistic overconfidence". (Ross, L., & Ward, A. (1995). Psychological barriers to dispute resolution. In *Advances in Experimental Social Psychology*, Vol. 27.

<sup>4</sup> For a very similar set of results, showing how random assignment to the role of defendant or plaintiff affects subjective beliefs about likely outcomes in court, see Babcock, Lowenstein, Issacharoff, & Camerer (1995), Biased judgments of fairness in bargaining. *American Economic Review*, 85, 1337-1343. Also Babcock, Wang, & Lowenstein (1996, forthcoming). Choosing the wrong pond: Social comparisons in negotiations that reflect a self-serving bias. *Quarterly Journal of Economics*, in press (February).

### Example 3: Biased Assimilation and Increased Conflict

Even more startling is the way in which biased assimilation can dramatically increase conflict, (through flawed application of information) when both parties are in possession of the same, balanced information. We have already seen how biased assimilation can contribute to Jim and Jill being at loggerheads, or the attorneys in *Eagle Insurance* preferring trial over settlement. However, biased assimilation can also generate, not just sustain, conflict.

Social psychologists have examined how such a process operates. In one study<sup>5</sup>, two groups -- death-penalty opponents, and death-penalty supporters -- were presented with two research articles. One article suggested that the death penalty was in fact an effective deterrent to other violent crimes, while the second article argued the opposite. Both articles were real, and were selected as having being rated by legal scholars as good examples of research, and as being approximately equally convincing.

Based on the examples in the earlier part of the note, it is not surprising that researchers found that each side paid more attention to the article that supported their own point of view, and decried the other as superficial and flawed, preferring to address methodological issues rather than engage the facts that countered their own views. What did *surprise* researchers however, was the finding that the two articles drove the two sides *further apart*. Thanks to biased assimilation of information, it was as if the supporting article gave further credence for a more extreme position, while opposing article counted not at all. As a result, the two sides became even more extreme and critical of the other's views. This disturbing finding, replicated many times, indicates that once a position is taken for each of two sides, biased assimilation of information will ensure that *simply exposing the two sides to real world "facts" will increase, rather than decrease conflict and disagreement*.

The previous point was vividly drawn out in another study which looked at Arab and Israeli views of news coverage of a particular incident in Lebanon in the early 1980s<sup>6</sup>. Despite the fact that neutral observers rated the coverage as balanced, both sides believed that the coverage had been greatly biased in favor of the other side, and denounced the media as dupes and sympathizers of their enemies. Thus biased assimilation of information can lead to a sense of isolation, or "us vs. them" mentality, and can, in certain instances, feed a somewhat paranoid siege mentality.

### Avoiding Biased Assimilation

Hopefully this note will alert the reader to the dangers of making decisions without being critical about the ways in which we have received, processed, and applied the information which formed the basis of those decisions. We should be particularly concerned about the effects of biased assimilation of information on the interactive context of negotiation. However, given that this process is inadvertent, it is not enough just to be aware or, and understand the phenomenon. Obviously, we are all capable of recognizing when facts flagrantly fly in the face of our wishes, and generally we can make those hard decisions. However, when choices are difficult to distinguish between, and when a lot of money is riding on getting it "right", it's not enough just to resolve to be careful.

In situations where decisions are made in a context, ideas can be challenged, and have to be defended in the crucible of debate. In addition, it is valuable to assign a role to people in such a decision-making group. "Who favors South Carolina? Jill? OK, make your case. Who favors Michigan? OK, Jim, take a swing". Sometimes, it may be that everyone in the group favors one alternative over another. Appoint a devil's advocate to make the best possible case for the unfashionable choice. In situations of ritualized confrontation such as in court cases or labor negotiations, one group may take on the role of the "other side", and the scenario gets played out. Even more formally, so-called Alternative Dispute Resolution (ADR) techniques offer a variety of procedures aimed at giving another perspective on likely outcomes, such as non-binding arbitration, decisions by experts or retired judges,

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<sup>5</sup> Lord, C. G., Ross, L., & Lepper, M. R. (1979). Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence. *Journal of Personality and Social Psychology*, 37, 2098-2109.

<sup>6</sup> Vallone, R. P., Ross, L., & Lepper, M. R. (1985). The hostile media phenomenon: Biased perception and perceptions of media bias in coverage of the Beirut massacre. *Journal of Personality and Social Psychology*, 49, 577-585.

and mini-trials. Such procedures can serve to shake the decision-makers out of a “group-think” mentality, and to look at merits of the various positions anew.

Another technique is so-called “role reversal”, in which one can try and argue as a member of the “other side”. There is an old lawyers’ trick in which the managing partner gets a younger associate in to help with a new case, and asks them to prepare and present the most devastating plaintiff strategy they can. After hearing the presentation from the young gun the older lawyer says: “That was great. The problem is we are representing the defendant. Now, how do we defend against the case you just laid out?” Once the strengths of the alternative argument has been assessed without the effect of biased assimilation, it is more likely that we will be more objective about the merits of our own position<sup>7</sup>.

Not all decisions are made in group context however, nor is it necessary clear that groups make better decisions than individuals. What if the buck really does stop on your desk? What is there is no group to bounce this off? How do we “de-bias” ourselves? The answer is that this is very, very, difficult. Many studies have investigated various techniques, such as trying to get people to sympathize with the alternative point of view, or articulating what part of the less popular view could be possibly attractive.<sup>8</sup> Most of these attempts turn out to be futile. However one study<sup>9</sup> has shown one method to be unusually effective. When asked to assess the weakest part of their own positions, participants in the study immediately moderated their assessments of the merit of their own position, made less extreme demands, and were more reasonable in their negotiation strategies<sup>10</sup>. It was as if, having finally realized some of the weaknesses in their own arguments, people immediately assumed that the other side could also figure out those problems, and hence they had better be more reasonable.

Ultimately, you have to confront your own biases. Ask yourself: “How do I *want* this to come out? Why?” Then ask yourself “What if I wanted it to come out the other way? How would I sell that idea to someone else?” In a sense, be your own devil’s advocate. Confronting your own biases will make you a better decision-maker. Although we like to pretend that we don’t have biases, we all do. Being aware of them gives us some degree of control over them, rather than being in their control. Give all points of view a chance -- then make your choice.

In a negotiation context, it is valuable to try and put yourself in the other player’s shoes. Ask yourself what information they are likely to weight heavily -- *and then instead of coming up with a reason why their logic is invalid, make the best case you can for that point of view*. This exercise will help you understand the bias in your own position, will help you anticipate the arguments and tactics of the other side, and lead to an appreciation of the other side’s priorities, needs, and interests, which is critical in achieving a mutually satisfactory and sustainable agreement. It is also important to realize that very often what we regard as “proof” is a socially-constructed fact that the other side may not accept as uncritically as we did, and likewise what we think of being self-serving hog-wash, the other side may see as convincing evidence of the validity of their position.

Being honest with ourselves is a tricky business. Many people may be uncomfortable with the idea of deliberately searching out the flaws in their own positions, giving credit to the other side’s perspective, and generally admitting they may be over-stating the merits of their own position. Why criticize ourselves? The other side will do an excellent job of that. Surely being totally convinced of the upstanding value of our own position will give us an edge in negotiation. Yes. And No. Keep in mind the lessons from the examples reviewed here, such as *Eagle Insurance*. It is fine to convince the other side of the value of our position: but if we come to believe our own story is the truth, we can end up with very unsatisfactory outcomes, such as being in court. It is also not the case that “winning” the argument

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<sup>7</sup> Brenner, Koehler, & Tversky (1993) showed that being exposed to only one side of the argument tends to distort our perception of the likely outcome, and overly increase our confidence. Taking the time to try and establish what the other side’s argument probably looks like can be an excellent check of this tendency.

<sup>8</sup> Keltner, D., & Robinson, R. J. (1993). Imagined ideological differences in conflict escalation and resolution. *International Journal of Conflict Management*, 4, 249-262. (Also HBS Working Paper 93-055).

<sup>9</sup> Babcock, Farber, Fobian, & Shafir (1996). *Forming beliefs about adjudicated outcomes: Perceptions of risk and reservation values*. Unpublished manuscript, Carnegie Mellon University.

<sup>10</sup> This is a variation on “Alexander’s Question”, which is essentially “what information would cause me to change my mind?”

is necessarily the best solution. The best solution is the best solution, regardless of the arguments we make to support our position. Unless we are prepared to consider alternative points of view, we will unquestionably miss out on opportunities to improve both personal and joint outcomes.