The Art & Science of Harvard-Style Negotiation[1)]

Peter A. Goldsbury

Negotiation is a form of conflict resolution. It can be undertaken as a confrontational or collaborative activity and can end with one-sided victory or compromise. It is usually seen as an art or skill and the majority of books on negotiation are manuals, which purport to explain how to conduct negotiations more successfully. Measuring success, however, is usually understood as giving reasons why any one negotiation was successful or unsuccessful—the parties obtained or did not obtain what they wanted. It is much more difficult to analyze the negotiation process, such that one can predict the outcome of any particular negotiations before they start.

Howard Raiffa is the *doyen* of a group centred on the Program on Negotiation at Harvard University. He initially trained in mathematics and game theory and, after an interlude of practical negotiating involved in the creation and directing of the International Institute for Applied Systems Analysis—a joint project of the US and USSR in Europe, returned to Harvard to teach negotiation analysis. *The Art and Science of Negotiation* is a preliminary digest of these experiences, which form the basis for important conclusions reached by the book, which are that negotiation is an art requiring a high level of skill, but can also be seen as a science, amenable to detailed analysis of game theory and decision making.

Terms

A critical question here is what is understood by the terms art and *science*.[2)] Unfortunately, Raiffa does not offer much help here, as may be seen from his opening definitions:

> *There is an art and a science of negotiation. By "science" I loosely mean systematic analysis for problem solving; and if the phrase "systematic analysis" seems a bit vague, I can only say that its meaning will become clearer as we go on. The "art" side of the ledger is equally slippery: it includes interpersonal skills, the ability to convince and to be convinced, the ability to employ a basketful of bargaining ploys, and the wisdom to know when and how to use them. The art of negotiation has been well documented throughout the ages; the science, on the other hand, is not well developed and what has been developed is not very accessible to the practitioner.*[3)]

As an art, negotiating is open-ended, in the sense that there is no limit to the skill we can acquire at it, this skill being measured by the number of times we are successful. The more we practise negotiation, the better we can become, but the question still remains whether analysis of past negotiations will reveal any set of data such that we can predict the outcome of any particular instance of negotiation in the future.

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1) A Review of *The Art and Science of Negotiation: How to Resolve Conflicts and Get the Best out of Bargaining,* by Howard Raiffa, The Belknap Press of Harvard University Press, Cambridge Mass., 1982, 2002.

2) In Japanese the problem is neatly sidestepped by the use if the term *koushougaku* 交渉学, with the translation usually left as *negotiation.* This term does not appear in Japanese dictionaries like the *Kojien* 広辞苑, nor, as far as I know, is there the term *koushoujutsu* 交渉術, but the differences between these two terms would probably convey the issues lying behind the issue of negotiation as art vs. science.

3) Raiffa (1982), pp.7, 8.

Raiffa also makes clear that he is concerned with "situations in which two or more parties recognize that differences of interest and values exist among them and in which they want (or in which one or more are compelled to seek) a compromise through negotiation."[4] Despite the difference of interest and values, the one fixed aim, in which the parties have the same univocal interest, is compromise and all the cases studies that Raiffa discusses follow this pattern.

Methodology

Raiffa starts by making some distinctions. Parties involved in negotiation can be two, or more than two. They can be "monolithic", or not, with each encompassing a variety of conflicting positions. The negotiations can be over one-time issues, or can be repetitive, like annual wage-bargaining sessions. Thry might deal with one single problem, or might be linked with other, analogous problems. They might involve a single issue, or multiple issues all at once, not all of which are clear at first sight. Some negotiations require the parties to reach an agreement, others might end with what Fisher & Ury call a BATNA.[5] Some negotiations end with an agreement which immediately goes into effect, others need to be ratified by other bodies with the final say. Some negotiations are amicable affairs with both sides doing their best to reach an amicable agreement, others are carried out under threats, but threats are a double-edged weapon, which may rebound on the user. Some negotiations are concluded quickly, others include a time element built into the equation. Negotiations are conducted with varying degrees of transparency, or the real aims or intentions of the other party or parties. Some negotiations are concluded without any indication whether the parties will actually abide by the agreement reached and this, too, might be one of the factors to be taken into account when deciding whether and how to negotiate. Negotiations can be undertaken in real or nominal secrecy, with details or progress or lack or progress carefully leaked to the media, and this, too, might be a factor to be taken into account by the negotiating parties. Negotiations are conducted according to a set of group norms, classified as collaborative antagonism, strident antagonism, or fully cooperative partnership. Raiffa excludes the latter two from consideration. Finally, negotiations are sometimes affected by the possibility of outside intervention and this can affect the progress and the outcome.[6]

The above seemingly obvious distinctions simply reveal the complexity of the negotiating process and contribute to the analysis of the process, in the sense that anyone undertaking any negotiation whatsoever would do well to be aware of the above distinctions. This is true no matter whether negotiation is regarded as a complex skill, or is open to more scientific analysis.

Raiffa goes on to indicate the type of analysis/research in which he is interested. This seems to be rather simple. Given two or more parties involved in negotiation, one can undertake descriptive research concerning the behaviour of all the parties involved, without giving any indication of how the parties should behave. This research Raiffa calls symmetrically descriptive. A major assumption here is that one can actually do this to a sufficient degree to be sure that the connections actually drawn between what is known, what is not known, the negotiating strategies decided upon, and the result of the negotiations are valid and sound.

Another type of research is to assume that all parties are as smart as possible, know all the facts about the subject of negotiation, and are impeccably rational. The aim is to find the best possible

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4) Raiffa (1982) p.7.

5) BATNA = Best Alternative To Negotiated Agreement. Roger Fisher and William Ury, *Getting to Yes: Negotiating Agreement Without Giving In*, Boston, Houghton Miffin, 1981.

6) Raiffa (1982), pp.11-19.

simulation model leading to the best possible strategy for the best possible negotiation leading to the best possible result. This research is employed in game theory and economics and the results are used to advise real negotiators on the best course of action to take. The advice is offered despite the fact that real negotiations in fact bear little resemblance to the simulation models, which necessitate ignoring the crucial differences between reasons and causes as the explanatory factors behind human actions. Raiffa calls this research symmetrically prescriptive.

These two types of research can be seen as the ends of a spectrum and one can also make another spectrum according to whether the research analysis concerns one party to the negotiations or to all parties and thus make the analysis, asymmetrically, of one or more parties to the negotiations, or of a facilitator, judge or arbitrator. Again, this research would be expected of a skillful negotiator, who might well find out everything possible about the issues involved, the aims and objectives of the other side(s) and also do mathematical simulations of the negotiations undertaken in optimal conditions. This research and analysis might have some bearing on the actual outcome of the negotiations and will be "scientific" as far as it goes, but will be insufficient to make any prediction of the outcome of the negotiations.

As the book proceeds, Raiffa's view of "systematic analysis" does indeed become clearer. It is based upon the case method, a method for which Harvard is renowned in the sphere of law, but whose appropriateness for negotiation is at best unproven. This analysis appears to consist of the following methodology:

1. Take a case involving negotiation and encompassing any or all of the aspects discussed above in the section entitled "Methodology".
2. Make as detailed a descriptive study of the case as possible.
3. Create a model of the case as a simulation game, with a quantifiable scoring system, that can be played as a game by student players. The game can be played very seriously indeed if the results count towards the student's grade for the course.
4. Have as many students as possible play the game.
5. Endeavour to achieve results, such that there is an optimal result, or an optimal bandwidth of results.
6. Analyze the methods used by individual groups to achieve the results and endeavour to arrive at an optimal method.

There is a gap in the analysis that Raiffa also admits at various points in his book. This is the gap between the optimal results or optimal methods arrived at by the students in their efforts to pass the course and the actual results achieved by real negotiators in real situations. The wealth of mathematical analysis and graphs supplied by Raiffa suggests that the gap is relatively small and that by analyzing the results of the simulations, it is possible to make reliable correlations between these and the results that real negotiators have actually achieved, such that equally reliable advice can be given to the latter who are about to embark on actual negotiations. The advice would have to be something to the effect that, *The issues involved in the negotiations you are about to undertake are very similar to an actual case that was actually resolved in such and such a way. A case study was made of these negotiations and a simulation game created. The simulation game was played by students as part of a course on competitive decision making and the results of the game, with x variations in the data, were these. In subsequent interviews the students revealed the following strategies. These results and strategies might be of some use to you.*

Conclusions

There is a dearth of literature on negotiation as an activity subject to quantifiable analysis, in other words, that is scientific in a sufficiently 'hard' sense that one may predict the results with a high degree of accuracy and also explain the cases where prediction failed. In this respect the modern art, or 'soft' science, of negotiation is similar to the ancient art of rhetoric, where its antecedents are to be found. Rhetoric was useful in Ancient Greece in those very cases where logical arguments fail to convince juries or voters. There is a great deal of systematic analysis in Aristotle's *Rhetoric*, which was the first book to give a detailed treatment of the art and mark it off from other arts like dialectic reasoning or the science of logic. Aristotle's *Rhetoric* is also a practical manual for rhetoricians to improve their skills, in large part by considering much more carefully than before what kinds of people they are trying to persuade and the psychological weapons they have at their disposal. In this respect Raiffa's *The Art and Science of Negotiation* follows in a distinguished tradition, but with a vastly different emphasis (very little psychology and more weight placed on the analysis of possibilities) and using vastly more sophisticated analytical resources, of decision-making analysis and game theory, than Aristotle had at his disposal.

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