Fundamentals of Providing Negotiation Support Online: the Need for Developing BATNAs

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abstract

Fisher & Ury claim that an important step in resolving a dispute is to be aware of one’s BATNA – what alternative parties have if negotiation fails. Providing accurate information is important, because disputing parties have a tendency to develop an overoptimistic view on their position in the dispute. The ‘reactive devaluation’ effect suggests that advice given by one’s opponent is less likely to be taken into account than the same information provided by a neutral. As Information Technology can be perceived as a neutral party, providing online BATNA calculation may be a useful extension to the ADR/ODR toolbox.

However, in order to determine BATNAs online, we need a proper understanding of exactly what is a BATNA. This paper argues that current understanding of what comprises BATNAs is insufficient for the intended purposes.

1. Introduction

Lawyers have been very slow, compared to other professionals, in the adoption of Information Technology (IT). Although still relatively low, IT use by the judiciary and other legal professionals is growing (e.g., Oskamp, Lodder & Apistola 2004). IT has also a role to play in helping parties resolve disputes. Not only are legal knowledge-based systems appearing as tools that provide legal advice to the disputing parties,² but also there are numerous systems that (help) settle disputes in an online environment. They are emerging in research labs and in the market place and are defined as Online Dispute Resolution (ODR) services (e.g., Katsh & Rifkin 2001; Kaufmann-Kohler & Schultz 2004).³

ODR systems are currently, primarily, systems that belong to the class of Alternative Dispute Resolution (ADR).⁴ These systems rely on Information and Communications Technology to support the resolution of disputes out of court, typically in an online environment. A well-known, and fairly popular⁵ example is Squar–etrade, an ODR service affiliated to eBay⁶ that provides an environment for direct negotiation and mediation. This system has handled over 1 million cases to date.⁷ Another successful ODR example is CyberSettle, a company providing a blind bidding service that has settled over 100,000 monetary disputes to date.⁸ In a blind bidding procedure, or automated negotiation, parties settle monetary disputes by submitting confidential offers and demands to a system that settles the issue by deciding upon the median amount as long as both bids come within a predetermined settlement range.⁹

Most of the current research and developments in ODR focus on facilitating the dispute resolution process: for instance, the provision of tools and techniques that assist parties in creating settlement proposals¹⁰ and even tools that to some extent decide certain issues by means of techniques, such as blind bidding.

An aspect that has received relatively little attention in ODR research is an examination of what decisions people have to make when they are engaged in a dispute. These decisions on the
procedure itself, and hence take place on a meta level when compared to the actual resolution of the dispute, are influenced by what happens in the dispute, but they are also partly influenced by factors outside of the dispute. Disputants make choices pertaining to issues, such as the type of procedure to adopt, whether to stop or proceed with a procedure, and the techniques to be used (such as blind bidding). Improving the quality of these decisions is important, because a badly considered decision may lead to an outcome that is worse, induces higher costs and/or more emotional discomfort. The support of professionals to help disputants make the right choices with respect to the dispute resolution process may contribute to the effectiveness and efficiency of ODR, as it helps people to determine whether ODR is a useful process for resolving the dispute.

In this paper we focus on the need to provide the parties in the dispute with proper information to make informed choices. This includes information, or knowledge, about issues, such as, the legal merits of a case, a party’s own and their adversary’s interests, information on the available methods for resolving conflicts, and the possible outcomes of these procedures. This knowledge will enable parties to make better judgements on their options and chances in a conflict. A well-known example of this kind of knowledge is Fisher & Ury’s (1981, pp. 97-106) concept of the ‘Best Alternative to a Negotiated Agreement’ (BATNA). They say that negotiators need to have an understanding of their options outside the process of negotiation, such as resorting to a court procedure, as it enables them to compare proposals made in the negotiation process with the best alternative outside the negotiation process. Although many scholars refer to the importance of developing a BATNA (e.g., Raiffa 1982, p. 45; Neale & Bazerman 1991, pp. 18-19; Pruitt & Carnevale 1993, p. 17; Raiffa et al. 2002, p. 110; Lewicki et al. 2003, p. 9), a precise notion of what constitutes a BATNA, is not available. Fisher & Ury refrain from giving a definition and prefer to talk about the concept in terms of examples. As our aim is to offer computer support with respect to the choices in the resolution process, which includes establishing the parties BATNAs, such an intuitive notion is inadequate for the task at hand.

The outline of this paper is as follows. Section II, starts with a brief discussion of the concept of a BATNA and why it is important to support parties in developing their BATNA. Next, in Section III we argue that determining BATNAs by means of a computer program is useful. In Section IV we argue that the use of IT to provide advice about BATNAs needs a more thorough understanding of the concept of a BATNA than is currently available. Section V concludes the discussion.

2. The Need for a Reality Test Provided by a Neutral

2.1 A closer look at the BATNA concept

In their seminal book ‘Getting to Yes’ Fisher & Ury (1981) introduce the BATNA concept as a tool for negotiators to cope with power imbalances, e.g. one party may have a stronger bargaining position, or more (financial) resources than her opponent. They claim that, if negotiators do take account of their options outside a negotiation, they are better protected against agreements that should be rejected. It also helps them to reach agreements that better satisfy their interests (Fisher & Ury 1981, p. 97). In order to assess whether an offer should be rejected, a party in a dispute has to establish what can be accomplished in alternative procedures to the one currently being conducted. This may include exiting the procedure altogether, or handing over the case to a court. Once the alternatives are known, these can be compared to what one expects to win by accepting an offer in the current procedure. If the proposal is worse than the (best) alternative outside the procedure, it should be rejected; if it is better it should be considered for acceptance. In this respect each party’s BATNA serves as a point of reference or a value with which to compare offers (Raiffa et al. 2002, p. 112).

The second reason why knowing one’s BATNA is important, is that it influences negotiation power. Parties who are aware of their alternatives will be more confident about trying to negotiate a solution that better serves their interests (Fisher & Ury, p. 102). When trying to sell one’s car to a second hand car dealer,
knowing what other car salesmen (or even individuals) offer or have offered for your (or a similar) car, helps in obtaining a reasonable price for your vehicle.

The BATNA concept is a useful metaphor in all dispute resolution procedures where parties have the option to exit the process, such as negotiation and mediation. A BATNA in this sense is a way to put pressure on the other party. If terminating the process has advantages over accepting the other party’s offer, it should be an incentive to continue the negotiation, else if the other party is unwilling to reconsider the offer, walking out is a very sensible option.

BATNAs not only serve a purpose in evaluating offers in the dispute, they can also play a role in determining whether or not to accept a certain dispute resolution method. In a recent article, Mookin (2003) wrote that having an accurate BATNA is part of the armory one should use to evaluate whether or not to agree to enter a negotiation. We believe this to hold for many dispute resolution methods, including arbitration and mediation, but also for tools and techniques within these methods, such as (blind) bidding, persuasion dialogues, and final offer arbitration. Comparing the possible (range of) outcomes with alternative options encourages parties to accept methods that are in the interests of disputants and enables them to identify those that are not. It is likely that most parties, to some extent, test the values of their BATNAs when assessing whether or not to opt for a certain dispute resolution method.

Although BATNAs are an important aspect of the dispute resolution, there is reason to believe that parties engaged in actual disputes are not very good at determining their BATNAs.

2.1 Optimistic Overconfidence

A large body of research shows that people have a tendency to develop an overly optimistic view on their chances in disputes (e.g., Neale and Bazerman 1991, pp. 53-55; Kahneman & Tversky 1995, pp. 46-50; Baron 2000, p. 367; Lewicki et al 2003, p. 157; Korobkin 2005). This process is referred to as ‘optimistic overconfidence’, because disputants have unrealistic optimistic expectations about the validity of their judgments (Lewicki et al 2003, p. 157). Neale and Bazerman (1983), for instance, showed this effect. In their (laboratory) experiment, both parties were asked to submit a final offer to an arbitrator. The participants were told that the arbitrator had to choose one of the offers. The experiment showed that the disputants, on average, believed to have a 65.4 percent chance of getting their final offer accepted, while on average their real chance of success is 50 percent. This experiment suggests that people systematically overestimate their probability of success in dispute resolution.

This effect of overestimating one’s position is present with respect to predicting outcomes of current situations as well as future events. These valuations and predictions influence how disputants calculate their BATNAs. The consequence of overly optimistic BATNAs is that a generous offer in a negotiation, or an offer to start a procedure that is in the interest of a party, is prone to be rejected. One of the likely sources of the overconfidence effect is that people find it hard to move from earlier positions (Pruitt & Carnevale 1993, p. 33). They strongly adhere to positions taken and are more likely to actively collect information that confirms the validity of their position, and they downplay or ignore information that refutes their choice. Howard Raiffa (2002, p. 36) calls this the ‘Confirming Evidence Trap’. Phenomena, such as optimistic overconfidence, are rooted in the psychological make up of people, and should be taken into account when trying to build dispute resolution tools.

The consequence of the optimistic overconfidence effect is that people regularly support positions or options that are incorrect (Lewicki et al. 2003, p. 157). People with overoptimistic BATNAs may reject procedures and proposals that might actually be in their interest. The effect on proposals is rather straightforward (tough luck, you ignored an excellent bargain), but the effect of not accepting certain procedures needs some explanation. An obvious alternative to accepting an offer to opt for an alternative dispute resolution method, such as arbitration or mediation, is to resort to a court proceeding. Many people think court proceedings have an all or nothing outcome. Hence, an
overly optimistic disputant may conclude that he or she is better off in court, than opting for a more cooperative procedure, such as mediation or negotiation. The cooperative procedure in this case is perceived as less attractive, because in such a procedure it is normal that both parties make concessions (see also Barendrecht & De Vries 2004, pp. 23-24). Our overoptimistic disputant will be reluctant to make concessions if she thinks she will surely be able to obtain everything she desires in court.

To limit the chances of optimistic overconfidence causing poor decision-making, it may be useful to provide the disputing parties with something one may call a 'reality test' of their BATNA. Who, or what, should provide this reality check?

2.2 Why neutrality is important: Reactive Devaluation

There are not that many possible sources for a reality check on BATNAs. To address it from a slightly different angle, who are those capable of presenting objective BATNAs. Obviously, the opponent appears not to be a suitable candidate as she has a vested interest in her own position or offer. Alternatively, actors sympathising with the person seeking advice may also not be too suited as they may fall into the same, or similar, traps as the information seeker. This leaves only a neutral party as a candidate.

Neutrality is an important value in any dispute resolution system. This has to do with the notion of fairness. In a court proceeding, the parties should be able to express their side of their case, and the judge should assess the arguments in an unbiased manner. This same lack of bias is the reason why neutrality is also of importance in other dispute resolution systems, such as ADR and ODR.

But fairness is not the only reason for providing advice on the realism of BATNAs by a neutral party. From a cognitive psychology perspective neutrality is valuable. People have the tendency to devalue information given by parties or organizations they perceive as adversaries. In the literature this psychological process is called 'reactive devaluation' and is supported by several empirical studies (e.g., Neale & Bazerman, p. 75; Ross 1995, pp. 29-38). One of the explanations for this phenomenon is that parties lack information about the interests and intentions of the other party. This lack of insight in the interests of others induces a kind of distrust in their opinions (we are talking of parties that are already in a dispute and hence a lack of trust in the opponent’s statements is inevitable) and the proposals the opponent presents. The idea that a proposal made by the opponent, naturally, benefits this person, is easily accepted.

The effect of the reactive devaluation process is that advice given by the opponent is not judged as 'neutral' advice. Therefore it is useful that someone or something that is perceived as neutral to both parties provides negotiation advice about BATNAs.

The ODR technology can, at least under certain conditions, play the role of such a neutral party, and hence could in principle be considered as an instrument to provide advice about the realism of BATNAs. The neutrality of the ODR technology may be jeopardized by non-technical circumstances, such as organizational ties to one of the parties and it may be enhanced by, for instance, a seal of approval of a consumer organization.

If indeed the technology is capable of assessing, or establishing objective BATNAs, then it could supplement ODR technologies in a useful way.

3. The Promise of Online Negotiation Advise

3.1 Focus on the Shadow of the Law

BATNAs have been explored in the context of online dispute resolution systems, although, as previously mentioned, not to a large extent. As most negotiations take place in the shadow of the law, an important aspect of BATNA advice is to know what might be the results of a court procedure. This is the context used in two projects addressing the establishment of BATNAs by computer programs.

Split-Up, a system that advises on property distribution following divorce (Zeleznikow & Stranieri 1995), gives its users an insight into the likely outcomes of a court procedure. The approach used in this project was to identify relevant factors in the distribution of property un-
der Australian family law. Ninety-four variables were identified as relevant for a determination in consultation with experts. The way the factors combine was not elicited from experts as rules or complex formulas. Rather, values on the 94 variables were extracted from cases previously decided. The Split-Up system was able to learn how the variables related to each other by using Knowledge Discovery from Databases (KDD). KDD is particularly suited to the discovery of knowledge in discretionary domains. The resulting Split Up system was capable of deciding new cases in a similar manner to which judges decided the cases used in the Split Up training set.

The knowledge available in Split Up can be used to establish BATNAs. The way this works is that the system first shows both litigants what they can expect to be awarded by a court if their claims are accepted. It gives them relevant advice as to what will happen if some or all of their claims are rejected. The Split-up system can also provide information about hypothetical situations, for instance what the effect on the property distribution will be if one of the parties is given the custody of the children.

On the basis of the example provided by Bellucci and Zeleznikow (2001), we can imagine the following situation. The claims of two disputants, husband (H) and wife (W) are entered into the Split-Up system. The system then predicts the outcome a judge will decide upon with respect to the distribution of marital assets over the parties. These outcomes can be considered as the extreme positions.

<table>
<thead>
<tr>
<th></th>
<th>W's%</th>
<th>H's%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wife's claims are honoured</td>
<td>65</td>
<td>35</td>
</tr>
<tr>
<td>Husband's claims are honoured</td>
<td>42</td>
<td>58</td>
</tr>
</tbody>
</table>

Table 1. Use of Split-Up to provide predictions on the distribution of marital assets

Table 1 shows, for instance, that if the Wife’s claims are all honoured, her ex-husband will receive 35% of the marital assets, whereas she will get the remaining 65%. However, as the parties in our dispute are unaware of the chances of getting their claims rewarded, this table in itself does not provide complete BATNAs. Suppose that the wife proposes the following distribution of assets:

<table>
<thead>
<tr>
<th></th>
<th>W's%</th>
<th>H's%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wife's proposal, including her getting custody over the children</td>
<td>60</td>
<td>40</td>
</tr>
</tbody>
</table>

Table 2. Use of Split-Up to provide negotiation advice

The proposal includes as a condition that she receives custody over the children. If the husband thinks he has a lower than 50% chance of winning a court procedure, and given that he has access to the BATNAs provided by the Split-Up system, he would be well advised to accept 40% of the common pool (otherwise he would also risk paying large legal fees and having ongoing conflict).

Another project that focuses on assessing the possible outcomes of litigation, is the BEST project - Batna Establishment using Semantic web Technology. The legal domain of this project is damages disputes, which concerns a substantial number of court cases. This project is still in its infancy, as it only commenced in early 2005. The project will provide litigants with information about the outcome of procedures, through intelligent disclosure of case-law using Semantic Web technology. In Best, BATNAs are constructed by extrapolating and combining the actual outcomes of similar cases to the case at hand on the fly. The cases in the case database are used as predictors for new cases.

Whereas Split-up uses a (static) explicit domain specific decision model constructed on the basis of an analysis of previous cases, BEST uses an approach that relies on finding decided cases similar to the case at hand, without having an explicit decision model. A BATNA in Split-up can be said to be an application of the rules in its knowledge base to the case at hand. A BATNA in Best consist of the outcome of the case that best matches the characteristics of the case at hand, to be found in a large, semi-structured document collection.
These projects are examples of some results and promising outlooks in determining BATNAs. Since most negotiations take place in the shadow of the law, an important aspect of BATNA advice is to understand the potential results of a court procedure. Outcomes are important, but other factors are also relevant for deciding whether or not to opt for a certain procedure or to accept a proposal in a procedure.

5. Why an enhanced Understanding of BATNAs is needed

We want to help parties to develop BATNAs through the use of online tools that operate without the intervention of a human third party. Hence it is important to know what elements are useful for constructing a BATNA that is accurate enough to provide useful advice. Such a scenario provides for a different context than one that makes use of a human mediator or advisor. The human agent can, on an ad hoc basis, decide which elements are relevant. The flexibility exhibited by human agents in judging or evaluating what is present, is largely lacking in the kind of tools we envision. We therefore need to have algorithms that rely on a (relatively) precise notion of what constitutes a BATNA.

Fisher and Ury (1981) focussed upon Outcome in their original discussion of BATNAs. The Split Up system and the Best project focus upon predictions with respect to the likelihood of a particular outcome in a court case. What is not taken into account, are factors that relate to the effort and risks involved in pursuing the various options. These factors play a role in determining whether it is wise to accept a particular offer.

An open research question is what the relevant factors are that play a role in determining the BATNA. Some factors, which in our view appear relevant, include:

- Outcome
- Risk
- Time
- Costs

The outcome is the decision in a court or arbitration, the agreement in a negotiation or mediation or the status quo situation if the alternative is walking away from the negotiation table or the dispute resolution process. When considering the outcome, we should probably, as in the Split Up case, take into account the parties’ preferences and also the likelihood of meeting certain goals or interests (in the view of the other party, for instance).

The risk can be modelled as the likelihood of obtaining a specific outcome.

The time is the duration of the whole (alternative) dispute resolution process. The expected timeframe of the conflict warrants consideration as a distinct entity in the BATNA equation as it captures some of the emotional aspects associated with the uncertainty with respect to the chances of resolving the conflict. This may especially be true for non-commercial disputants.

Cost and benefits are important factors, as most disputants will have limited resources. Costs may include the costs of the neutral, the costs of help by advisers such as lawyers, the costs of experts, the opportunity costs of the time spent, and the costs of uncertainty. The (range of possible) outcome(s) may be a benefit or a cost, depending on whether the outcome is an improvement or a loss compared to the status quo, the situation before the resolution process started. Although modelling these factors in terms of monetary values is useful, there may be reasons to represent some factors using other metrics.

Whether these are the factors we should consider and how these factors weigh and interrelate, is an open question. Avoiding risk, for instance, is an important element of negotiation and one that needs to be considered when developing BATNAs. A BATNA, which would require a high risk to be obtained (in terms of costs or time), may be less acceptable than a low risk BATNA.

The above is a far from complete rendering of what comprises a BATNA. There are many other open questions to resolve. For instance:

- are BATNAs domain specific (e.g. the Split Up factors), or is it possible to devise mechanisms that provide advice on BATNAs without domain knowledge about the dispute?
- are BATNAs legal system specific, or can methods designed for Dutch civil cases be
used for Australian family law disputes as well?

- what is the role of disputants becoming more aware of the underlying evidence (through dialogues with their opponents) on their BATNA?
- what are the differences between the BATNAs with respect to making choices regarding offers made by the opponent in a negotiation and the choice with respect to methods and tools to further the dispute resolution process?
- is outcome in the sense as described above, the defining feature of a BATNA, or are (perceived and real) time, cost, effort and risk much more relevant factors?

6. Concluding remarks
In this paper, we have discussed some problems people face in determining BATNAs on the basis of 'shortcomings' in their cognitive make-up. We have also argued that, if we want to use BATNAs to offer disputants better advice on whether they should accept an offer made by their opponent, or proceed to litigation, we need a better understanding of what is a BATNA. The questions outlined above show that we are only at the beginning of grasping a better understanding of BATNAs. Yet, in order to provide people with useful tools to support their online dispute resolution, we need to have a better understanding of the mechanisms and factors that are relevant in making decisions within and about the procedure. Otherwise, designing computer support for establishing BATNAs will either be a case-by-case affair, or at best, be a very difficult task.

Whilst having an accurate BATNA is important, it does in itself not resolve the dispute. In negotiations and mediation, whether online or offline, we still need to try to ensure that parties focus on their interests and encourage parties to seek creative solutions to their dispute.

Notes
1. Berend de Vries, LL.M. is a research fellow at TILT, the Tilburg Institute for Law, Technology, and Society of Tilburg University, The Netherlands. Dr. Ronald Leenes is an associate professor of IT, Law and Public administration at TILT. Dr. John Zeleznikow is a professor of Information systems and director of the Donald Berman Research Unit for IT and Law, International Corporate Governance Research Institute, at Victoria University, Australia.
2. See for instance how Zeleznikow (2003) has used legal decision support systems to offer advice that will increase access to justice. The Economist March 12 2005, in an article AI and the law, Economist Technology Quarterly, pp. 21-22, comments upon this trend.
3. For an extensive overview of the literature on ODR, see the ODR Library at www.odr.info.
4. We follow the approach of the American Arbitration Association’s Task Force on E-commerce and ADR that define ODR as ‘a broad term that encompasses many forms of ADR and court proceedings that incorporate the use of the Internet, websites, email communications, streaming media and other information technology as part of the dispute resolution process’. This definition also includes the use of online technologies in courts; see Kaufmann-Kohler & Schultz (2004, pp. 5-7).
6. eBay is an online auction site, see <www.ebay.com>.
9. This range is often 20 or 30%. See also Kaufmann-Kohler & Schultz (2004, pp. 17-21) and Katsh & Rifkin (2001, pp. 61-62).
10. An example of a system that does help reaching (better) agreements is SmartSettle, <www.smartsettle.com>. Part of the SmartSettle process is the automated generation of improved settlement proposals. See Thiesen & McMahon (2000) for a detailed discussion of the SmartSettle process, which used to be called 'One Accord'.
11. This is an existing dispute resolution method called Final-offer arbitration (Brown & Marriot 1999, p. 63).
12. This, of course is not a new idea, Korobkin, for instance discusses the option of a medi- 
diator offering direct evaluation of possible chances in litigation to the parties in a dis- 
13. We are not arguing per se that ODR tech- 
nology is unbiased. Indeed the underlying 
system has the bias of its developer. But this 
is also a problem when relying upon books 
for advice or using the advice of experts.
121-177).
15. Best is a project of the members of the AI 
department and the Law faculty of the Vrije 
Universiteit Amsterdam.

6. References
Barendrecht, J.M. & De Vries, B.R. (2004), Fitting 
the Forum to the Fuss with Sticky De- 
faults: Failure on the Market for Dispute 
Resolution Services?, Working Paper (SSRN 
572042).
Baron, J. (2000), Thinking & Deciding, 3rd ed., 
Cambridge: Cambridge University Press.
Bellucci, E. and Zeleznikow, J. (2001), Representa- 
tions for decision making support in ne- 
gotiation., Journal of Decision Support, 10 (3- 
4), 449-479.
Maxwell.
Conley-Tyler, M. (2004), 115 and Counting: The 
State of ODR 2004, in: Conley Tyler, M., 
Katsh, E. & Choi, D. (Eds.), Proceedings of 
the Third Annual Forum on Online Dispute 
Negotiating Agreement Without Giving In, 
Houghlon Mifflin/Penguin Books.
Fogg, B.J. (2003), Persuasive Technology: Using 
Computers to Change What We Think and Do, Morgan Kaufmann.
Kahneman, D. & Tversky, A. (1995), Conflict 
Resolution, A Cognitive Perspective, in: Ar- 
row, K., Mnookin, R.H., Ross, L., Tversky, A. & Wilson R. (Eds.), Barriers to Conflict Resolu- 
tion, New York: W.W. Norton Company, 
pp. 44-60.
Katsh, E. & Rifkin, J. (2001), Online Dispute 
Resolution: Resolving Disputes in Cyberspace, 
Kaufmann-Kohler, G. & Schultz, T. (2004), On- 
line Dispute Resolution: Challenges for Con- 
temporary Justice, The Hague: Kluwer Law 
International.
Korobkin, R. (2005), Psychological Impediments 
to Mediation Success: Theory and Practise, 
UCLA School of Law Law & Economics Re- 
search Paper Series, No. 05-9 (SSRN 689261).
Lewicki, R.J., Barry, B., Saunders, D.M. & Minto 
ton, J.W., Negotiation, 4th ed., New York: 
Neale, M.A. & Bazerman, M.H. (1983), The role 
of perspective-taking ability in negotiating 
under different forms of arbitration, Indus- 
trial and Labor Relations Review, 36, 378- 
388.
Neale, M.A. & Bazerman, M.H. (1991), Cogni- 
tion and Rationality in Negotiation, New 
York: The Free Press.
Mnookin, R. (2003), When Not to Negotiate, 
University of Colorado Law Review, 74, 1077- 
1107.
Oskamp, A., Lodder A.R. & Apistola, M. (eds.) 
(2004), IT Support of the Judiciary: Australia, 
Singapore, Venezuela, Norway, the Nether- 
lands and Italy, Information Technology and 
Asser Press.
Pruitt, D.G. & Carnevale, P.J. (1993), Negotiation 
in Social Conflict, Maidenhaed, Philadelphia: 
Open University Press.
Raiffa, H. (1982), The Art and Science of Negotia- 
tion: How to Resolve Conflicts and Get the 
Best Out of Bargaining, Cambridge, Massa- 
chusetts: The Belknap Press.
Negotiation Analysis: The Science and Art of 
Collaborative Decision Making, Cambridge, 
Massachusetts: The Belknap Press.
Ross, L. (1995), Reactive Devaluation in Negoti- 
tation and Conflict Resolution, in: Arrow, 
K., Mnookin, R.H., Ross, L., Tversky, A. & 
Wilson R. (Eds.), Barriers to Conflict Resolu-

