

## **Negotiating about charges and pleas – balancing interests and justice**

Geraldine Mackenzie · Andrew Vincent · John Zeleznikow

### **Geraldine Mackenzie**

Faculty of Law, Bond University, Gold Coast, Australia; Email: gmackenz@bond.edu.au

### **Andrew Vincent**

School of Accounting Business Information Systems, University of Melbourne, Melbourne, Australia; Email: andrewdvincent@hotmail.com

### **John Zeleznikow**

School of Information Systems, Victoria University, Melbourne, Australia  
Email: john.zeleznikow@vu.edu.au

### **ABSTRACT**

There is a worldwide movement towards alternatives to judicial decision-making for legal disputes. In the domain of criminal sentencing, in Western countries more than 95% of cases are guilty pleas, with many being decided by negotiations over charges and pleas, rather than a decision being made after a judge or jury has heard all relevant evidence in a trial.

Because decisions are being made, and people incarcerated on the basis of negotiations, it is important that such negotiations be just and fair. In this paper we discuss issues of fairness in plea-bargaining and how we can develop systems to support the process of plea and charge negotiation.

We discuss how we are using Toulmin's theory of argumentation and Lodder and Zeleznikow's model of Online Dispute Resolution to develop just plea bargaining systems. A specific investigation of the process of charge negotiations is discussed.

### **KEYWORDS**

Plea bargaining, Sentencing, Dispute Resolution, Justice

## 1. INTRODUCTION

The mantra ‘*two legs bad, four legs good*’, taken from Orwell’s *Animal Farm* (Orwell 1945) is similar to the statement ‘*negotiation good, conflict bad*’. This mantra, often accepted by courts and governments is that negotiation is preferable to litigation in almost all circumstances.

However, as Mnookin (2003) argues, knowing when to negotiate and when to refuse to negotiate is vital. For example, On September 30 1938, Neville Chamberlain, the prime minister of the United Kingdom, returned from Munich saying ‘*we have peace for our time*’. Within twelve months, Kristallnacht had occurred<sup>1</sup>, the Molotov-Ribbentrop pact was signed<sup>2</sup> and World War Two<sup>3</sup> had commenced.

Even now supporters (or apologists) of Chamberlain rationalise that he was correct, and that his actions in Munich won the United Kingdom vital time to prosecute the war<sup>4</sup>. So how can we measure when to negotiate and when to conduct conflicts, especially when knowledge is not transparent. Rather than solely focusing upon resolving conflicts, should we possibly concentrate on just managing the conflict? Condliffe (2008) argues that some conflicts cannot be resolved at all, and certainly not easily.

Blum (2007) argues that protracted armed rivalries are often better managed rather than solved, because the act of seeking full settlement can invite endless frustration and danger, whilst missing opportunities for more limited but stabilising agreements. She examines in detail enduring rivalries between India and Pakistan, Greece and Turkey and Israel and Lebanon. She notes that in each of these conflicts, neither party is willing to resolve the core contested issues but both may be willing to carve out specific areas of the relationship to be regulated – what she calls *islands of agreement*.

---

<sup>1</sup> On a single night, November 9-10 1938, more than 2,000 synagogues were destroyed and tens of thousands of Jewish businesses were ransacked. It marked the beginning of the systematic eradication of the Jewish people – the Holocaust - see Gilbert (2006).

<sup>2</sup> The pact, signed on August 23 1939, was a non-aggression pact between Germany and the Union of Soviet Socialist Republics that included a secret protocol for dividing the then independent countries of Estonia, Finland, Latvia, Lithuania, Poland and Romania into Nazi and Soviet spheres of influence – see Taylor (1961)

<sup>3</sup> On September 1 1939, when Germany invaded Poland.

<sup>4</sup> As did the former Australian Prime Minister Sir Robert Gordon Menzies in the twenty-second Sir Richard Stawell Oration ‘*Churchill and his contemporaries*’ delivered at the University of Melbourne on 8 October 1955 – see [www.menziesvirtualmuseum.org.au/transcripts/Speech\\_is\\_of\\_Time/202\\_ChurchillContemp.html](http://www.menziesvirtualmuseum.org.au/transcripts/Speech_is_of_Time/202_ChurchillContemp.html) last accessed 23 July 2008

Similarly, rather than resolve a family dispute, should we just manage it so that minimal conflict or disruption occurs? Eventually, the dispute might be more easily resolved or due to the progress of time, the dispute may no longer exist – such as when dependant children become adults.

In both Australian and United States criminal law jurisdictions, a defendant can appeal a decision if they believe the judicial process was flawed. However, when negotiating about pleas – known as plea bargaining, a participant cannot challenge the decision. The reason for this situation is that unlike in a trial, the defendant has pleaded guilty and thus admitted that he or she committed the crime. This situation becomes problematic in the admittedly few cases where a person accepts a plea bargain even though they did not commit the crime. The defendant may plead guilty because he or she was offered a heavily reduced sentence, or he or she felt the probability that they would be found guilty is reasonably high (Mackenzie 2007; Henham 1999).

Thus, it is very difficult to undo an '*unfair plea negotiation*'. But it is also essential that it be possible to reverse unfair decisions.

Hence, especially in criminal sentencing, it is vital that we develop '*fair*' and '*just*' negotiation support systems. Indeed, one of the barriers to the uptake of Online Dispute Resolution relates to user concerns about the fairness and consistency of outcomes achieved by any Online Dispute Resolution approach. Pierani (2005), in discussing Online Dispute Resolution in Italy, argues that as with Alternate Dispute Resolution models, Online Dispute Resolution systems need to be impartial, transparent, effective and fair.

This is especially so in criminal law, because of the different proof requirements in civil and criminal law and the fact that criminal law cases involve the state prosecuting an individual, it is vital that issues of fairness be addressed.

### *1.1. Plea Bargaining in general*

Negotiation between defence advocates and prosecutors about charges and pleas usually leads to a plea of guilty. Conviction rates by way of guilty plea in western jurisdictions, run in the order of 90-95%. This is particular so in the US (Colella 2004). In lower courts the rate of conviction by guilty pleas is usually higher than

95%. Where charges are more serious the rate of conviction by guilty plea is lower. Plea bargaining is the one of the most contentious processes in the criminal justice system, its most vehement opponents are usually those who are not involved in the day to day activity of either prosecuting or defending offenders. Despite judicial ambivalence to the practice in the most part, plea bargaining continues to function because discretion about the nature, number and severity of charges is granted to prosecuting authorities by statutes. Plea bargaining can benefit the prosecution by ensuring a conviction and achieving greater certainty, and the defence by negotiating fewer or reduced charges (Mackenzie 2007).

There are a range of criticism that are made concerning plea bargaining, perhaps most significant is the lack of transparency and the public's perceived lack of fairness which ultimately translate in to complete lack of trust in the efficaciousness of the entire system. In this paper we first examine the phenomena of plea bargaining in general and then look at the particularities of its practice in Victoria. In the next section of the paper we expose similarities between plea bargaining and alternative dispute resolution (ADR) and then move on to the role that sentence indication plays in the process. In the fourth part of the paper we discuss ideas of justice and fairness and the role systems have in constructing accountability. In the fifth section we discuss online dispute resolution (ODR) and a possible method of facilitating plea bargaining within the constraints of current practice. In the final section of the paper we discuss the problems with validating this type of system and the future research directions including the construction of a prototype system.

The introduction to a recent plea bargaining symposium held at the Law School at Marquette University in Milwaukee, Wisconsin, suggests that although plea bargaining would seem to be a natural area for collaboration between criminal law and dispute resolution there has been very little "cross-fertilization" between the two fields ((O'Hear and Kupfer Schneider, 2007)). Indeed research has progressed in the two areas utilising theories and methods developed in other areas, not solely limited to, for example, psychology. Plea bargaining research could gain for example from the large amount of work conducted in negotiation and mediation on fairness and procedural justice (Lind and Tyler, 1988), (Törnblom and Vermunt, 2007).

Plea bargaining is the process where the prosecution and defence advocates negotiate or bargain or haggle over the nature, number and severity of the charges to be brought and the offenders plea of guilty.<sup>i</sup> It usually involves the reduction in the number,

nature and severity of the charges by the prosecutor in order to secure a guilty plea from an offender. Plea bargaining is only concerned with one thing and the defendant can only ever offer their guilt as the benefit to the prosecutors. This definition follows that offered by Alschuler (Alschuler, 1979) who also indicates that plea bargaining omits all forms of other concessionary bargaining, such as reductions in charges because of other cooperation. In the United States, plea bargaining is a ubiquitous practice and its occurrence is gaining strength in other jurisdictions (Ma, 2002). There has been a tremendous amount of criticism in academic circles of the practice of plea bargaining, many scholars argue that aside from the obvious lack of transparency and accountability of the procedure, prosecutors have become the primary adjudicators of guilt in the criminal justice system (see for example Bibas (2004) and Wright and Miller (2002)). By offering substantial reductions to defendants who cooperate with them, prosecutors strongly influence issues of guilt and innocence through the various methods of charge and plea negotiations. In most cases judges merely rubber stamp the negotiated arrangement.

As alluded to above, the practice of plea bargaining is common in the United States, and increasingly so in Australia (Mackenzie 2007; Seifman and Freiberg 2001). Even though the practice is very wide spread there are few figures available on the extent of the practice. It is usually inferred from the amount of convictions by way of guilty plea recorded in official court statistics. Indeed, the number of felony convictions in US state courts for 2004 was estimated to be 1,078,920 of which approximately 95% were disposed of by guilty pleas.<sup>ii</sup> The figures for the US Federal Court, even though the numbers are considerably lower, track very similarly, albeit for the year 2007. Of the 88,014 convicted felons, 96% were by way of guilty plea.<sup>iii</sup> The truly remarkable aspect of the statistical compilation is the complete lack of information on the number of guilty pleas affected by way of plea bargaining. There have been very few studies to determine the actual numbers of guilty pleas that have been brought about by negotiation or bargaining. A 1977 study on plea bargaining practices in the Birmingham Local Court in the United Kingdom, suggested that while up to 90% of cases in the US are disposed of by way of guilty plea the number that are the result of bargains remains unknown ((Baldwin and McConville, 1977)). The same study reported the researcher's surprise to find that 70% guilty pleas in their sample were

negotiated. Hollander-Blumoff ((Hollander-Blumoff, 1997)<sup>5</sup>) suggests that, "[b]y most accounts, plea bargaining disposes of approximately 90% of all criminal cases in the US." Hollander-Blumoff cites the guilty plea rates as evidence for her conclusion. The lack of empirical data is understandable given the difficulty in accessing offenders and prosecutors. Notwithstanding this difficulty it is clear that more empirical evidence is required.

The high rate of conviction by way of guilty plea has led commentators to suggest that the criminal justice system would grind to a halt if all offenders exercised their rights to trial (Ward and Birgden 2007). However, guilty pleas would still be tendered without the explicit process of plea bargaining. There are still many incentives for defenders to plea guilty besides the reduction in the number and severity of charges. Most jurisdictions offer sentencing discounts for guilty pleas and the Federal Sentencing Guidelines allowing for downward departures based on guilty pleas.

In the US, much has been made recently regarding the prosecutors ability to in effect coerce defendants to plead guilty. Langer (Langer, 2007) distinguishes between two different types of plea bargaining, the first is where the prosecutor unilaterally decides who is innocent and guilty and for which offence, by using coercive plea proposals. The second type of plea bargaining is where the prosecutor and defence jointly determine guilt via voluntary agreement.

In jurisdictions where there are mandatory minimum sentences, the possibility of coercive bargaining is greater because in effect prosecutors have a direct impact on the sentence available to a judge. The success of the plea bargaining process "depends on [the] prosecutor's ability to make credible threats of severe post-trial sentences (Stuntz, 2004)<sup>6</sup>." Credible threats concerning sentence severity are enhanced in jurisdictions that have determinate sentencing regimes. Thompson (Guerra Thompson, 2005) indicates that by the end of the 1990s, fifteen States introduced sentencing guidelines, while seven were in the process of enacting relevant legislation. Most States in the United States have some form of mandatory minimum sentences for specific crimes (Reitz, 2001). Reitz suggests that even though there has been an impressive shift in determinate sentencing structure across the United States, most jurisdictions continue to maintain a high-discretion model of indeterminate sentencing for the majority of their punishment decisions. The majority of punishment decisions

---

<sup>5</sup> At pp 116-117

<sup>6</sup> At p2560

to which Reitz refers may very well be the majority of less common crimes that litter statute books. Most mandatory penalties are reserved for common crimes, especially relating to drugs, robbery and theft, and assaults (Frase, 2005).

In Australia, the concept of plea negotiation is widely practised in all States but practitioners and academics alike prefer different terminologies. The practice is usually known as charge negotiation (Cowdery, 2005) or, more commonly, plea negotiation (Seifman and Freiberg, 2001)

A major difference between the American and Australian plea bargaining practice is that in Australia, the prosecutor is only able to influence the minimum sentence that may be delivered by a judge by manipulating the number of charges, this is known as overcharging. It seems that the greatest amount of overcharging occurs in lower courts (Mack and Anleu, 1995). In the higher courts, where Offices of Public Prosecution and not the police handle prosecution, there is a tendency not to overcharge. Mack and Anleu (1996) suggest several reasons for this overcharging, but the most important one is that it gives the police a better bargaining position. The police propose high charges in order to end up with what they see as a “correct” or reasonable set of charges for a particular set of facts.

The high percentage of cases disposed of by guilty pleas is not seen in Victoria. In 2003 and 2004, approximately 70% of cases were disposed of by guilty pleas<sup>7</sup>.

There is a 25% difference between this rate and the rate of guilty pleas in the US. The difference is probably attributable to the determinate sentencing regimes that are prevalent in most United States jurisdictions and the fact that defendants often spend a long time on remand awaiting final disposition of their cases. The resultant plea bargain is often for a sentence of time served (Bibas, 2004).

But the practice of plea bargaining, while enhancing the efficiency of court administration, can result in many injustices. As in most aspects of negotiation, the parties in dispute do not generally have equal bargaining power. For example, defendants often have limited legal knowledge and sometimes a very limited ability to understand the charges of which they are accused. They do not have the time, money, or resources for protracted conflict. Thus, they may plead guilty to the commission of a crime, even when they know they are not guilty of committing the crime.

---

<sup>7</sup> OFFICE OF PUBLIC PROSECUTIONS ANNUAL REPORT 2003-2004 (Vict., Austl.), at 21 app. A, *available at* <http://www.opp.vic.gov.au/wps/wcm/connect/Office+Of+Public+Prosecutions/resources/file/eb62ed006698fd0/O PP Annual Report 2003-04.pdf> Last accessed October 28 2008.

There has been considerable judicial and academic debate in Australia over the nature and justification for the guilty plea discount ((Mack and Anleu, (1997), Mack and Anleu (1998), Field (2002) and Bagaric and Brebner (2002)). Seifman and Freiberg (2001) claim that plea bargaining is inherently useful to the criminal justice system, not just because of administrative efficiency; as it enables the accused, if properly advised, to negotiate concessions in the form of reduced charges or which facts are to be put before the court. It is critical however that the accused has as certain as possible an indication of the sentence which will be imposed (Mack and Anleu 1995), and this is where the current system is lacking.

### *1.2. Plea Bargaining and Alternative Dispute Resolution*

Because plea bargaining requires some type of negotiation or bargaining, some scholars treat plea bargaining according to the classic observation in negotiation literature that negotiation occurs in the shadow of the law. The shadow of trial concept was introduced by Mnookin and Kornhauser (1979). By examining divorce law, they contended that the legal rights of each party could be understood as bargaining chips that can affect settlement outcomes. Plea bargaining in the United States, even though it has had the support of the Supreme Court for more than thirty years,<sup>8</sup> has been heavily criticized because of the power of the prosecutor to selectively utilize the bargaining process. Bibas (2004) gives a very detailed exposition of the factors that affect plea bargaining and how they impact the fair allocation of punishment. He claims that trials in the United States already allocate punishment unfairly and that plea bargaining adds another layer of distortion. The idea put forward by Bibas is that the shadow cast by law is very much diminished and because of the fact that very few trials are conducted, plea bargaining occurs under the influence of other factors. Both Bibas and (Stuntz, 2004) have at the heart of their respective discussions the claim that the Mnookin-Kornhauser model is not really applicable to the plea-bargaining process because of the great number of other

---

8.Brady v. United States, 397 U.S. 742 (1970). Here, the Court stated:

[W]e cannot hold that it is unconstitutional for the State to extend a benefit to a defendant who in turn extends a substantial benefit to the State and who demonstrates by his plea that he is ready and willing to admit his crime and to enter the correctional system in frame of mind that affords hope for success in rehabilitation over a shorter period of time than might otherwise be necessary.

*Id.* at 753.



influences on the actors and players in plea bargaining than exist in divorce negotiations.

There are possible negative consequences of negotiating about pleas. Bibas (2004) argues that many plea bargains diverge from the shadow of trials. He claims that rather than basing sentences on the need for deterrence, retribution, incapacitation or rehabilitation, plea bargaining effectively bases sentences in part on wealth, sex, age, education, intelligence and confidence.

Adelstein and Miceli (2001) develop a general model of plea bargaining, embed it in a larger framework that addresses the costs of adjudication, the value of punishing the guilty and the costs of false convictions, and then link the desirability of plea bargaining and compulsory prosecution to the weights given these costs and benefits in the objective function.

Gazal-Ayal (2006) investigates the economics of plea bargaining. He proposes having a partial ban on plea bargains, which prohibits prosecutors from offering substantial plea concessions. He argues that such a ban can act to discourage prosecutors from bringing weak cases and thus reduce the risk of wrongful convictions. Tor, Gazal-Ayal and Garcia (2006) conducted experiments in which they determined that defendants' willingness to accept a plea bargain is substantially reduced when defendants feel that the offer is unfair, either because they are not guilty or because other defendants received better offers.

Wright and Miller (2003) believe that pervasive harm stems from charge bargains due to their special lack of transparency. They argue that charge bargains, even more than sentencing concessions, make it difficult after the fact, to sort out good bargains from bad, in an accurate or systematic way.

Although it may be possible to suggest that plea bargaining is a form of dispute resolution is a unique form. Any attempt to apply generic lessons of negotiation theory in criminal law should be undertaken with great care.

As indicated by O'Hear and Kupfer Schneider (2007) dispute resolution involves the allocation of limited material resources between two parties of roughly equal and moral status. The transaction in plea bargaining is between parties of a different sort (the citizen and state). There is a major asymmetry between the status, power and objective of the two sides that marks out plea bargaining in significant ways from other forms of negotiation commonly studied by dispute resolution scholars. (Freiberg, 2007) discusses ADR in the criminal justice system and suggests that

ADR should be understood as appropriate dispute resolution rather alternative dispute resolution. He further indicates that rather concentrating upon dispute resolution, the focus of the criminal justice system should be on problem solving. Plea bargaining should be viewed through the lens of problem solving in the same space as sentence indication. All efforts should be made to identify guilty pleas early in the process and then move to the next stage in the criminal justice system, namely the therapeutic phase.

Hollander-Blumoff (1997) concentrates on Fisher and Ury's notion of BATNA (Fisher and Ury 1981). In the process of negotiating about pleas it is vitally important that the defence has an accurate indication of the sentence that might be expected: a) as a result of trial and b) as the result to a plea of guilty. A recent discussion of sentence indication in Victoria highlights the importance of scheme where judges indicate a likely outcome in terms not necessarily of sentence but whether or not a conviction or jail time for example maybe warranted for a particular charge or set of charges<sup>9</sup>. It is contingent on certain disclosures by both the prosecution and the defence.

## **2. SENTENCING INFORMATION SYSTEMS AND NEGOTIATION SUPPORT SYSTEMS**

Achieving consistency and fairness is critical in the sentencing process (Mackenzie, 2002). Hall et al (2005) argue that one of the central and perennial questions of sentencing law and scholarship is how lawmakers should strike an appropriate balance between consistency and individualization in punishment. They believe that their technology-based solutions can help to maximize consistency of process in bounded discretion-sentencing regimes. They use decision trees<sup>10</sup> and Toulmin argument trees<sup>11</sup> to model reasoning about sentences in the Victorian County Court. Such solutions enable greater flexibility to achieve consistency in complex cases where large numbers of interdependent factors need to be taken into consideration by

---

<sup>9</sup> See

[http://www.sentencingcouncil.vic.gov.au/wps/wcm/connect/Sentencing+Council/resources/file/ebb5cd402c7f553/Sentence\\_Indication\\_Final\\_Report.pdf](http://www.sentencingcouncil.vic.gov.au/wps/wcm/connect/Sentencing+Council/resources/file/ebb5cd402c7f553/Sentence_Indication_Final_Report.pdf) last accessed 28 October 2008

<sup>10</sup> A decision tree is an explicit representation of all scenarios that can result from a given decision. The root of the tree represents the initial situation, whilst each path from the root corresponds to one possible scenario.

<sup>11</sup> See section 4.

the sentencing judge. This is in contrast to most Sentencing Information Systems, which use statistical techniques to advise upon a range of issues (Schild and Zeleznikow 2008).

Structured sentencing laws create a more pressing need for information systems that allow prosecutors to monitor the selection of charges and resolution of plea negotiations, since those decisions now influence more directly the sentences that the judge ultimately imposes. Wright and Miller (2003) and Wright (2005) point out the powerful influence of prosecutor office policy and data monitoring in creating reasonably consistent outcomes in plea negotiations. Hall et al (2005) stress that they are not concerned with considering the vexed issue of consistency of outcomes, but rather, they are concerned with the consistency of approaches to decision-making (procedural consistency) and the presentation of arguments to support decision-making.

Traditional Negotiation Support Systems have focused upon providing users with decision support on how they might best obtain their goals. Zeleznikow and Bellucci (2006) and Zeleznikow and Vincent (2007) have considered the problem of incorporating justice into interest-based negotiation support systems. Zeleznikow et al (2007) considered the development of computer tools for Bargaining in the Shadow of the Law in plea-bargaining and family mediation, as well as examining how to measure and evaluate consistency and justice in negotiation.

Building systems to support the various parties involved in the sentencing process is fraught with difficulties. Tata (2000) has detailed the effort in the construction of the Scottish Sentencing Information System and discusses some of the reasons why judicial decision support systems are not well received by the judiciary. One of the primary reasons for judicial ambivalence is the fact that most systems do not accurately reflect either the manner in which judges reach their decision or are so complicated that they are virtually useless. Until now, we have not discussed the link between how a sentencing decision is reached and how the reasons for the sentence are articulated. In Australia written decisions are not always made available for sentencing decisions at first instance. The opaqueness of the process is further exacerbated by the lack of articulation of reasons.

We now describe a decision support system we are developing to assist criminal defence lawyers at Victoria Legal Aid to provide advice about plea bargaining and sentencing. The sentencing decision support system is being extended into a plea

bargaining support system, using the three step online dispute resolution environment of Lodder and Zeleznikow (2005).

### 3. THE TOULMIN ARGUMENT MODEL FOR BUILDING NEGOTIATION SUPPORT SYSTEMS

Vincent and Zeleznikow (2005) discusses research pertaining to the construction of a plea bargaining decision support system for Victoria Legal Aid (VLA). VLA finds decision support systems that advise upon appropriate decisions for the sentencing of criminals, as well as systems that will help in the plea negotiation process, very useful for training and providing support for novice lawyers.

VLA is the principal provider of legal aid in Victoria, in fact VLA is the largest criminal law practice in the State and handles upwards of eighty percent of criminal law defence cases in Victoria. It employs solicitors to act on behalf of people and provides a range of specialist legal services. It is funded by a combination of Commonwealth government, Legal Practice Board's Public Purpose Fund and state government monies also legal cost received by VLA. It is in their interests to be able to provide sound advice regarding possible sentences as the result of guilty pleas. The sentencing decision support prototype and its ability to provide the reasoning behind a sentence as well as a sentence range means that VLA lawyers can better negotiate with Office of Public Prosecution lawyers and police prosecutors. The reasoning behind a particular sentence can act as an argument in favour of a particular charge over another.

The approach to modelling the discretionary and intuitive domain of sentencing is based on the model of argument proposed by Toulmin (1958). The Toulmin model is concerned with showing that logic can be seen as a kind of jurisprudence rather than science. The jurisprudential nature of the Toulmin argument structure means that it is process focused and more useful in structuring an argument after it has been articulated. It is able to capture arguments regardless of content. The procedural nature and simplicity of the Toulmin model means that argument chains can be constructed by linking together single argument units.

The claim of one argument can be used as the data item for the next. According to Toulmin, an argument is made up of a combination of five components: a claim, some data (grounds), a warrant, some backing, and a qualifier. Claims are ideas that the

arguer would like the audience to believe. The data lends support to the claim and makes it more likely that the audience will believe it. The warrant, on the other hand, is the logic of the argument: the rules of inference that lead the claimant to conclude the claim, given one ground or a set of grounds<sup>12</sup>. Backings usually give reasons why the audience should believe the warrant. Modal qualifiers modify the claim by indicating a degree of reliance on, or scope of generalisation of, the claim, given the grounds, warrants, and backing available. Rebuttals are the possible exceptions to the conditions under which a claim holds.

The Toulmin argument structure offers those interested in knowledge engineering a method of structuring domain knowledge. It also enables the reasoning behind certain claims to be made explicit. In any system that will be of use to decision makers, reasons for decisions are important, especially for transparency. The Toulmin Model has been used to model other legal domains (Zeleznikow 2003) most notably family law in the Split-Up system which advised disputing partners regarding property distribution at divorce (Stranieri et al 1999), refugee law (Yearwood and Stranieri 1999) and copyright law (Stranieri and Zeleznikow 2001). The use of Toulmin Argumentation in Online Dispute Resolution is discussed in Zeleznikow (2006).

The modelling phase was undertaken by knowledge engineers in conjunction with domain experts to establish the practical nature of the sentencing environment in Victoria. After reading the relevant parliamentary acts governing the Victorian sentencing system, both knowledge engineers and domain experts developed the decision and argument trees. The modelling procedures and steps are more fully discussed in Hall et al (2005).

With the support of a grant from the Victorian Partnership for Advanced Computing, TAMS software is being used to convert free-text sentencing decisions into a fixed format. Following from the successful use of neural networks in the family law domain (Stranieri et al 1999) we are using neural networks and association rules to glean how sentencing decisions are made<sup>13</sup>.

---

<sup>12</sup> It should be noted that inferences can be provided by humans rather than machines. This occurred in the Embrace System (Yearwood and Stranieri 1999) which dealt with the discretionary issue of appeals to the Australian Refugee Review Tribunal.

<sup>13</sup> See Zeleznikow and Hunter (1994) and Stranieri and Zeleznikow (2005) for an excellent discussion of the use of artificial intelligence in law

#### 4. AN ONLINE PLEA NEGOTIATION ENVIRONMENT FOR THE VICTORIAN CONTEST MENTION SYSTEM

Criticisms of plea negotiation have centred around several key issues, namely: transparency, inducements and coercion, and incorrect outcomes (Bibas 2004). Mack and Anleu (1996) have identified faults in the process. The significant points include:

1. The transparency of the process: in general, plea bargaining occurs outside the court system.
2. Guilty pleas may be induced by the unwarranted benefits of those burdens caused by the decision to go to trial. The quantum of sentence discount that is associated with the plea of guilty is an added pressure to engage in plea bargaining.
3. Incorrect outcomes in terms of both the determination of guilt and the subsequent sentence imposed.

These three main areas of concern are all present in the Victorian Contest Mention system. If the accused decides to plead guilty to the charges filed, the charges are dealt with at the time of the Contest Mention hearing. The facts of the case are presented orally to the magistrate by the prosecutor by way of a written summary of the offence, which has been agreed to by the defence lawyer. There is no transparency in this process, as the magistrates are presented with only an altered copy of the summary and it is this summary alone that is preserved on the record.

The Victorian Magistrates' Court deals with over 95% of all criminal offences that are resolved in Victorian courts.<sup>14</sup> Of the 130,890 matters finalised in 2003-04, 9082 were finalised via the Contest Mention.<sup>15</sup>

In 1993, as a result of the severe impact of late guilty pleas,<sup>16</sup> the Contest Mention system was introduced in the Broadmeadows Magistrates' Court. It was initially a pilot program with the specific aims:<sup>17</sup>

---

<sup>14</sup> The figure of 95% is derived from the *Victorian Magistrates' Courts Sentencing Statistics: 1996/1997-2001/2002*, p. 1. A brief examination of both the *Victorian Magistrates' Courts Sentencing Statistics: 1996/1997-2001/2002* and the *Victorian Higher Courts Sentencing Statistics: 1997/1998-2001/2002* leads to a figure of around 97% of all defendants who had charges decided without resort to either bench or jury trial.

<sup>15</sup> *Magistrates' Court of Victoria 2003-04 Annual Report*, 15.

<sup>16</sup> Identified in part in the Pegasus Task Force Report, *Reducing Delays in Criminal Cases* (1992).

1. To reduce the number of cases originally listed as pleas of not guilty that turned into guilty pleas at the court door.
2. To identify the plea (guilty or not guilty) at an early stage.
3. To reduce the number of adjournments.
4. To narrow the issues between the parties to areas of genuine dispute thereby reducing wasted preparation time by both the prosecution and the defense.
5. To reduce the instances of witnesses' time being unnecessarily wasted.
6. To generally assist in 'case flow management' techniques.

The Contest Mention system is a set of procedural guidelines for assisting the prosecution and defence lawyers in identifying guilty pleas. Attempting to identify guilty pleas involves negotiation and, as indicated by Cowdery (2005),<sup>18</sup> "principled negotiation"<sup>19</sup>. This involves the separation of the people from the problem this will be discussed a little later. One of the main features of the Contest Mention system is the process of sentence indication.<sup>20</sup> The magistrate can give an indication as to a possible sentence if the accused continued with a plea of guilty at the Contest Mention. It is only conducted in appropriate circumstances. The Contest Mention guidelines state that the procedure should only be undertaken when the magistrate is aware of all the relevant factors.

For the accused, the burdens of going to trial are caused by the probability of conviction by a jury and the consequent threat of a usually higher sentence based on the higher number and severity of the charges filed by the prosecution and the lack of a sentence discount for an early guilty plea. In the case of an impasse in the Contest Mention, the magistrate can offer an opinion as to the relative strengths and weaknesses of both the prosecution and defence cases. This opinion is not derived from formal evidence or even a reading of the summary, but rather from information provided by the prosecution and defence counsel.

---

<sup>17</sup> A more detailed discussion of the implementation of the Contest Mention system is available in Serge Straijt, *The 'Contest Mention System' in the Magistrates' Court. Some of its effect and impact on the administration of criminal justice* (Unpublished Report, 1995).

<sup>18</sup> At 2, 2.

<sup>19</sup> See especially Fisher and Ury (1981) at 17-39.

<sup>20</sup> *Magistrates' Court – Guidelines for Contest Mention*, 3.

We are constructing a plea negotiation support environment for Contest Mentions in the Victorian Magistrates' Court and more broadly plea negotiations in other jurisdictions. The current system is intended to be used by VLA lawyers to support plea negotiations and possibly to train inexperienced advocates. The system consists of two major parts.

The first part is a sentencing decision support system which provides information as to possible range of sentences and also the probability of attaining the recommended sentence. The second part is an environment for plea negotiation. The first and integral part of the overall system advises on possible sentence so as to properly apprise defendants of all the possible negotiation outcomes. The effects of suggested charge changes can be assessed using the sentencing information system part of the overall system.

We are constructing the system using the Lodder-Zeleznikow framework. The key points of this framework are:

1. Accurate provision of advice about a BATNA.
2. Developing a process that enables direct communication and negotiation between the parties which supports interest based communication.
3. Developing a process that provides negotiation support through the use of compensation and trade-off strategies.

**The BATNA:** The sentencing decision support system described above, provides a BATNA. The sentencing decision support system provides advice concerning possible sentences, as well as giving information about how these sentences might be combined, either cumulatively or consecutively in the case of multiple charges. It must be remembered though, that the sentence is not being negotiated; it is a plea of guilty to a particular charge or set of charges that needs to be decided.

BATNA advice in plea negotiation, at present, is not provided by specific electronic tools. Zeleznikow and Stranieri have developed a system to provide BATNA advice in the Family Law domain (Bellucci and Zeleznikow 2006). Once an offer is made it must be measured against the BATNA. The step of reality testing is very important in the process of alternative dispute resolution (ADR).



De Vries et al (2005) indicates that in the final stage of the negotiation process, reality testing provides an excellent method of ensuring that parties are fully aware of the agreement they are about to reach. The plea negotiation process is a form of shuttle bargaining, an offer followed by a counter offer. The defence lawyer evaluates the quality/benefit of the offer and either accepts or rejects the offer and makes a new offer. This is the case in the Contest Mention system as it operates in Victorian Magistrates' Courts. Unless the defence lawyer is experienced, the types of negotiations that occur before the beginning of the Contest Mention can be very problematic and difficult. A less experienced lawyer might accept a plea that might not be the best achievable outcome in the situation even though it may have been perfectly adequate for another defendant in a different case.

**Communication:** There are various methods of electronic communication available for parties to conduct negotiations. E-mails, SMS messaging, telephone, "snail" mail can all be used for effective communication. For example, Square Trade<sup>21</sup> is one of the largest suppliers of online dispute resolution and utilises e-mail exchange via a mediator to resolve issues.

The method of negotiation discussed in the Lodder-Zeleznikow model needs to be adjusted to reflect the differences in the process of resolving plea negotiations. The fact that the defence need not make any disclosures but the prosecution must divulge all the facts, as they are relevant to the charges, must be taken into account in our revised model. The argument tool used in the Lodder-Zeleznikow model is utilised to make explicit how the statements of the parties support their arguments. The tool makes the parties enter statements in a sequence that reflects the evidence cited for supporting each party's goals.

**Negotiation:** The method that is utilized in the Lodder-Zeleznikow model to support compromises and trade-offs revolves around the creation of lists of issues. In the case of the Contest Mention, the concerns of the prosecutor and the defence may well be overlapping in some respects, but can also be quite different in others. There are two matters that might be of little concern to the

---

<sup>21</sup> More information about the range of services offered by Square Trade can be found at <http://www.squaretrade.com/cnt/jsp/index.jsp> (at 20 November 2006).

defendant but of a much greater concern to the prosecutor; the impact on the victim and restitution.

Most of the other issues in dispute will revolve around the facts of the crime. These will usually be aggravating factors that make the sentence more severe. The accused may well plead guilty to a crime but not admit to certain facts. The perceived strength of the prosecutor's evidence will be the major inhibitor to a plea bargain being struck. The Lodder-Zeleznikow framework includes a phase where compromise and trade-offs are utilized to assist in the resolution of disputes. The trade off part of the Lodder-Zeleznikow model is based on the Family\_Winner system (Bellucci and Zeleznikow 2006). The system asks individuals for their positions and importantly their reasons for taking their positions. The system uses a point allocation procedure to distribute items or issues to the participant who values the item or issue more. The system provides possible suitable allocation of items or issues but is dependant on human interlocutors to accept and finalize an agreement.

The Contest Mention system does not at first glance lend itself to the process of creating lists of issues. One of the greatest problems to overcome in this process is the case of multiple charges. Combining charges is one of the methods that the prosecutor may use to ensure that a plea of guilty is obtained for a particular desired charge. The various charges that might be levelled for a particular set of facts will vary if the defendant does not admit to the veracity of some of the facts.

One of the key elements in the authors' on going research is to establish what is negotiable in the plea negotiation and how the information can be represented and negotiated using the Lodder-Zeleznikow model.

## 5. FUTURE RESEARCH

One of the most difficult tasks still remaining is the validating the system. The usual method of validating expert systems requires experts trialling the system with a real case or cases and then measuring the accuracy of the advice provide by the system. Our Negotiation Support System will require two levels of validation, the first relating to the sentencing indication and the second to the accuracy of the replication of the process of the negotiation.

As noted in section one, plea-bargaining can be seen as a form of negotiation that has benefits of administrative efficiency for the prosecution and provides certainty for the defence. Generally, the interests of the parties focus upon reduced sentences and reducing costs. In other negotiation domains, in particular housing disputes and family relationships, more complex trade-offs can be employed to meet the parties' interests.

In conjunction with industry partners Relationships Australia and Victoria Body Corporate we have received substantial funding from the Australian Research Council to develop negotiation support systems to enable the continuation of constructive relationships following disputes.

In this project we wish to combine integrative bargaining, bargaining in the shadow of the law and formulation to develop decision support systems that support mediation and negotiation, specifically in body corporate and family disputes. We will:

- a) develop negotiation support systems that support formulation: both in Family Law and Body Corporate disputes. The systems will respect ethical and legal principles and rely upon processes that are not only fair but are perceived by the parties to be fair.
- b) construct negotiation support systems that provide planning advice to help avoid disputes rather than resolve conflicts.
- c) develop an integrated Online Dispute Resolution environment that provides relevant legal knowledge, allows for communication and provides decision support tools.
- d) use knowledge discovery from databases techniques to try and learn how mediators provide advice.
- e) thoroughly evaluate and re-engineer our negotiation support systems.

In a project with title 'Developing negotiation support systems in law which encourage more consistent and principled outcomes' we argue that unless negotiation support systems are seen to advocate outcomes which arise from consistent and principled advice, disputants will be reluctant to use them. We are conducting research that will develop measures for assessing the outcomes of online negotiation in the legal domains of sentencing, plea bargaining and family mediation. Such measures will form the basis of a new model for evaluating justice and consistency within online dispute resolution systems.

The model will inform the construction of fairer and more consistent systems of IT-based negotiation support in the future.

To meet this goal we will:

1. Develop models of consistency and justice based on two very distinct legal domains: sentencing and family law. Further, the knowledge about these domains will be shared from three distinct Common Law jurisdictions: Australia, Israel and USA.
2. Develop information retrieval techniques to extract knowledge from textual legal and negotiation data.
3. Use KDD techniques (such as association rules, Bayesian belief networks and neural networks) to compare litigated and negotiated family law cases.
4. Develop models of disputation and negotiation in both family law and sentencing. These models will then be tested to examine how closely they align with the notion of Bargaining in the Shadow of the Law (as compared to 'pure' interest-based negotiation).
5. Use Lodder and Zeleznikow's three step model for an Online Dispute Resolution Environment and Toulmin's theory of argumentation to construct a generic online dispute resolution environment. The development of such an environment on which to place various negotiation support systems will increase users' access to justice.
6. Develop and evaluate specific sentencing and negotiation support systems using our newly developed Online Dispute Resolution Environment.

## 6. CONCLUSION

The Toulmin model, although probably intended as a method of exploring arguments in a more theoretical setting, is finding itself used more and more in representing knowledge in different types of decision support whether computerized or not. The great benefit of this type of system comes about as it begins to make the intuitive part of sentencing more transparent and open to scrutiny. This system provides a method for lawyers, both experienced and

inexperienced, to make better arguments for sentences for client before the bench.

In this paper we have considered how a plea bargaining decision support system can help support the advocacy provided by Victoria Legal Aid. Such systems are particularly useful for training novices. The first step in the plea bargaining process is determining relevant sentences. With this goal in mind, we have developed an appropriate decision support system. We are currently using the sentencing decision support system together with the Lodder-Zeleznikow three step online dispute resolution environment to build our plea bargaining decision support system.

Rhode (2004) suggests that “*Court-appointed lawyers’ preparation is often minimal; sometimes taking less time than the average American spends showering before work.*” As part of the overall push to improve access to justice, decision support system can help to achieve that goal. They can provide important advice for the legally disadvantaged. This advice is useful both at trial and in conducting charge and plea negotiations.

The Lodder-Zeleznikow framework is a useful method for the construction of a negotiation support environment for the charge and plea negotiation process. It has great potential for making the plea negotiation process more transparent and efficient, both in Australia and overseas.

## References

- ADELSTEIN, R. and MICELI, T. J. (2001), Toward a Comparative Economics of Plea Bargaining. *European Journal of Law and Economics*, 11(1): 47-67
- ALSCHULER, A. W. (1979) Plea Bargaining and Its History. *Law and Society Review*, 13, 211-245.
- BAGARIC, M. and Brebner, J. (2002) The Solution to the Dilemma Presented by the Guilty Plea Discount: The Qualified Guilty Plea - 'I'm pleading guilty only because of the discount....' *International Journal of the Sociology of Law* 30(1): 51-74
- BALDWIN, J. & MCCONVILLE, M. (1977) *Negotiated Justice: Pressures to Plead Guilty*, London, Martin Robertson.
- BELLUCCI, E. and ZELEZNIKOW, J. (2006) Developing Negotiation Decision Support Systems that support mediators: a case study of the Family\_Winner system, *Journal of Artificial Intelligence and Law*, 13(2): 233-271.
- BIBAS, S. (2004). Plea bargaining outside the shadow of the trial, *Harvard Law Review*, 117:2464-
- BLUM, G. (2007). *Islands of Agreement: Managing Enduring Armed Rivalries*, Harvard University Press, Cambridge MA.
- COLELLA, S. (2004) "Guilty, Your Honor": The Direct and Collateral Consequences of Guilty Pleas and the Courts that Consistently Interpret Them *Whittier Law Review* 26: 305.
- CONDLIFFE, P. (2008) *Conflict Management: A Practical Guide*, 3rd ed, Lexis Nexis, Sydney
- COWDERY, N (2005) Creative Sentencing and Plea Bargaining: Does it Happen and What Are the Results?, *LAWASIA BIENNIAL CONFERENCE: LAWASIA DOWNUNDER* 2.
- FIELD, R. (2005) Federal Family Law Reform in 2005: The problems and pitfalls for women and children of an increased emphasis on post-separation informal dispute resolution, *QUT Law and Justice Journal*, 5(1):28.
- FISHER, R. and URY, W. (1981) *Getting to YES: Negotiating Agreement Without Giving In*, Boston: Houghton Mifflin
- FRASE, R. S. (2005) State Sentencing Guidelines: Diversity, Consensus, and Unresolved Policy Issues. *Columbia Law Review*, 105.
- FREIBERG, A. (2007) Non-adversarial Approaches to Criminal Justice, 17 *Journal of Judicial Administration* 1-19
- GAZAL-AYAL, O. (2006) Partial Ban on Plea Bargains, *Cardozo Law Review*,

- GILBERT, M (2006) *Kristallnacht: Prelude to Destruction*, Harper Collins, London..
- GUERRA THOMPSON, S. (2005) Sentencing Guidelines in the US: A Primer. *Reform*, 86, 45-48.
- HALL, M. J. J., CALABRO, D., SOURDIN, T. STRANIERI, A., and ZELEZNIKOW, J. (2005) Supporting discretionary decision making with information technology: a case study in the criminal sentencing jurisdiction, *University of Ottawa Law and Technology Journal*, 2(1): 1-36.
- HENHAM, R. (1999) Bargain Justice or Justice Denied? Sentencing Discounts and the Criminal Process *Modern Law Review* 62: 515.
- HOLLANDER-BLUMOFF, R. (1997) Getting to "Guilty": Plea Bargaining as Negotiation. *Harvard Negotiation Law Review*, 2, 115-148.
- LANGER, M. (2007) Rethinking Plea Bargaining: The Practice and Reform of Prosecutorial Adjudication in American Criminal Procedure. *American Journal of Criminal Law*, 33, 223-299.
- LIND, E. A. & TYLER, T. R. (1988) *The Social Psychology of Procedural Justice*, New York, Plenum Press.
- LODDER, A. and ZELEZNIKOW, J. (2005) Developing an Online Dispute Resolution Environment: Dialogue Tools and Negotiation Systems in a Three Step Model. *The Harvard Negotiation Law Review*. 10:287-338.
- MA, Y. (2002) Prosecutorial discretion and plea bargaining in the United States, France, Germany and Italy: A comparative perspective. *International Criminal Justice Review*, 12, 22-52.
- MACK, K. and ROACH ANLEU, S. (1995) Pleading Guilty: Issues and Practices, *AUSTL. INST. JUDICIAL ADMIN.*, 136.
- MACK, K. and ROACH ANLEU, S. (1996). Guilty pleas: Discussions and agreements, *Journal of Judicial Administration*, 6(8):9.
- MACK, K. and ROACH ANLEU, S. (1997). Sentence Discount for a Guilty Plea: Time for a New Look *Flinders Journal of Law Reform*, 1:123
- MACK, K. and ROACH ANLEU, S. (1998) Reform of Pre-Trial Criminal Procedure: Guilty Pleas, *Criminal Law Journal*, 22:263.
- MACKENZIE, G. (2002) Achieving Consistency in Sentencing: Moving to Best Practice? *University of Queensland Law Journal* 74: 22.
- MACKENZIE, G. (2007) The Guilty Plea Discount: Does Pragmatism Win Over Proportionality and Principle *Southern Cross University Law Review* 11: 205.

- MNOOKIN, R. (2003) When Not to Negotiate, *University of Colorado Law Review*, 74, 1077-1107.
- MNOOKIN, R. and KORNHAUSER, L. (1979). Bargaining in the shadow of the law: The case of divorce, *Yale Law Journal*, 88: 950-997.
- O'HEAR, M. M. & KUPFER SCHNEIDER, A. (2007) Dispute Resolution in Criminal Law. *Marquette Law Review*, 91, 1-8.
- ORWELL, G. (1945) *Animal Farm*, Secker and Warburg, London, UK
- REITZ, K. R. (2001) The Disassembly and Reassembly of U.S. Sentencing Practices. IN TONRY, M. & FRASE, R. S. (Eds.) *Sentencing and Sanctions in Western Countries*. Oxford, Oxford University Press.
- SCHILD, U. and ZELEZNIKOW, J. (2008) A comparative study of decision support systems for the sentencing of criminals. To appear in *Journal of Decision Systems*.
- SEIFMAN, R. and FREIBERG, A. (2001) Plea Bargaining in Victoria: The Role of Counsel, 25 *CRIMINAL LAW JOURNAL* 64,.
- STUNTZ, W. J. (2004) Plea Bargaining and Criminal Law's Disappearing Shadow. *Harvard Law Review*, 117, 2548-2569.
- STRANIERI, A. and ZELEZNIKOW, J. (2001) Copyright Regulation with Argumentation Agents *INFORMATION AND COMMUNICATIONS TECHNOLOGY LAW* 10(1): 109-123.
- STRANIERI, A. and ZELEZNIKOW, J. (2005) *Knowledge Discovery from Legal Databases*, Springer Law and Philosophy Library, Volume 69, Dordrecht, The Netherlands  
ISBN: 1-4020-3036-3.
- STRANIERI, A., ZELEZNIKOW, J., GAWLER, M. and LEWIS, B. (1999) A hybrid—neural approach to the automation of legal reasoning in the discretionary domain of family law in Australia. *Artificial Intelligence and Law* 7(2-3):153-183.
- TATA, C. (2000) Resolute ambivalence: Why judiciaries do not institutionalise their decision support systems, *International Review of Law, Computers and Technology*, 14: 297-316.
- TAYLOR, A. J. P., 1961. *The Origins of the Second World War*, Gale, London.
- TOR, A., GAZAL-AYAL, O. and GARCIA, S. (2006) *Fairness and the willingness to accept plea bargain offers*. Available at SSRN [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=880506&rec=1&srcabs=560401](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=880506&rec=1&srcabs=560401) Last accessed 28 October 2008.
- TÖRNBLOM, K. & VERMUNT, R. (Eds.) (2007) *Distributive and Procedural Justice: Research and Social Applications*, Aldershot, Ashgate.



- TOULMIN, S. (1958) *The Uses of Argument*, Cambridge University Press: Cambridge,
- WARD, T and BIRGDEN , A. (2007) Human rights and correctional clinical practice, *Aggression and Violent Behavior*, 12 (6): 628-643.
- WRIGHT, R., (2005) Prosecutorial Guidelines and the New Terrain in New Jersey, *109 Penn. St. L. Rev.* 1087-1105.
- WRIGHT, R. and MILLER, M. (2002) The Screening/Bargaining Tradeoff, *Stanford Law Review*, 55:29-117.
- WRIGHT, R. and MILLER, M. (2003) Honesty and Opacity in Charge Bargains, *Stanford Law Review* 55:1409-1417.
- VINCENT, A. and ZELEZNIKOW, J. (2005) Towards a Plea Bargaining Decision Support System for Legal aid Lawyers in Victorian .Lower Courts, *Proceedings of Second International ODR Workshop*, Wolf Legal Publishers, Nijmegen, Netherlands. 47-58.
- De VRIES, B, LEENES, R. and ZELEZNIKOW, J. 2005. Fundamentals of Providing Negotiation Advice Online: the Need for Developing BATNAs. *Proceedings of Second International ODR Workshop*, Wolf Legal Publishers, Nijmegen, Netherlands. 59-67.
- YEARWOOD, J. and STRANIERI, A. (1999). The Integration of Retrieval, Reasoning and Drafting for Refugee Law: A Third Generation Legal Knowledge Based System. In *Proceedings of Seventh International Conference on Artificial Intelligence and Law*, 117–126. ACM: Oslo.
- ZELEZNIKOW, J. (2003) An Australian Perspective on Research and Development required for the construction of applied Legal Decision Support Systems, *Artificial Intelligence and Law*, 10: 237-260.
- ZELEZNIKOW, J. (2006) Using Toulmin Argumentation to support dispute settlement in discretionary domains, in D. Hitchcock and B Verheij (eds) *Arguing on the Toulmin Model: New Essays in Argument Analysis and Evaluation*, Springer, Dordrecht, Netherlands: 261-272.
- ZELEZNIKOW, J. and BELLUCCI, E. (2006) Family\_Mediator - adding notions of fairness to those of interests. *Proceedings of Nineteenth International Conference on Legal Knowledge Based System*. IOS Publications, Amsterdam, Netherlands, 121-130.
- ZELEZNIKOW, J., BELLUCCI, E., VINCENT, A and MACKENZIE, G., (2007) Bargaining in the shadow of a trial: adding notions of fairness to interest-based negotiation in legal domains, *Proceedings of Group Decision and Negotiation Meeting 2007*, Volume II, G. Kersten, J. Rios, E. Chen (eds.) Concordia University, Montreal, Canada, 978-0-88947-454-3, 451-475.

ZELEZNIKOW, J. and HUNTER, D. 1994. *Building Intelligent Legal Information Systems: Knowledge Representation and Reasoning in Law*, Kluwer Computer/Law Series, 13.

ZELEZNIKOW, J and VINCENT, A. (2007) *Providing Decision Support for Negotiation: The Need for Adding Notions of Fairness to Those of Interests*, UNIVERSITY OF TOLEDO. LAW. REVIEW 38:101-143.

---

<sup>i</sup> In this paper we use the term bargaining and negotiation interchangeably, it worth noting that there is some disquiet in some circles about the use of the term bargaining.

<sup>ii</sup> Table 5.46.2004. It is most notable that for the more serious crimes the percentage of conviction via guilty plea drops considerably. Of the number of felony convicted of murder 69% were by way of guilty plea.

Bureau of Justice Statistics Source Book of Criminal Justice Statistics (<http://www.albany.edu/sourcebook/>, at 20 November 2006), especially tables 5.17 and 5.46. Bibas (2004) also indicates that it is impossible to know the percentage of guilty pleas that resulted from plea bargaining.

<sup>iii</sup> Table 5.24.2007. The percentage of convictions secured by way of guilty pleas for murder in District courts is 78% (calculated on very low numbers 117 of the 146 total).