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Civil Standards and Justice

An Interactive Qualifying Project Report

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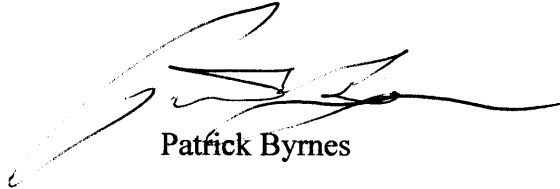
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Abstract

The goal of this project is to formulate a rational civil justice system by first defining concepts of justice. Through examination of these concepts, the objective of this system is to minimize injustice.

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Introduction

There are many problems with the current United States civil court system. The goal of this project is to create a practical civil system by correcting to the highest degree possible the inherent problems. A major problem with the current civil system is that it operates on the concept of “preponderance of the evidence”. This essentially means that whoever presents the strongest case wins. The problem with this procedure is that often produces intuitively wrong results. When two or more defendants are involved in a case the odds of the plaintiff presenting a stronger case decrease, and, likewise, with multiple plaintiffs.

One of the most important concepts in legal thought is that of fallibility. Any functional legal system will not be able to judge cases completely correctly all of the time. After realizing that it is not possible to be just, we are left with the task of determining what the goal of our new system should be.

In order to do this, we will analyze the history of the U.S. civil system to better understand its origins. We will analyze the motivations behind changes in law from medieval times to the present day. This information should provide a solid foundation of civil practices that have demonstrated, through time, to work effectively in dealing with civil disputes. Using this foundation we will develop our fundamental definition of justice. This definition will form the basis for a new civil system.

To test the validity of our system, we will compile a case study. This case study will be examined using our proposed civil system and the U.S. civil system. We will compare the U.S. system to our new system. This study should demonstrate that our system performs more effectively than the current U.S. system.

Background

Justice is not an easy concept to define, and this is part of the reason why the definition has changed so many times. Law and justice are closely related, and every time the law changes the concept of justice also changes. Over time, there have been many different ideas about what is just. It is important to know why there have been so many different ideas. No one definition of justice is always right and, as a result, every system can be refined or replaced. Each time it is refined, the concept of justice it represents is refined. An examination of the changes in the law and, especially, the motivations behind them, can show the judicial principles that have been proven to work. This background will trace the evolution of the present system, starting in the Middle Ages. The discussion will center on the legal changes, the motivations behind them, and the judicial principles they allude to. The result will be a collection of concepts of justice that defines the current system on a fundamental level.

In Medieval times, as they still do now, questions arose regarding the pursuit of justice and how a society should handle it. The answers that were reached reflect the society that produced them. The methods of dispensing justice had strong religious overtones. The ultimate judge in any matter was the Lord, whose word was beyond question. In doubtful matters, the word of God was invoked through a process called the ordeal. Trial by ordeal was typically a very painful process, involving either hot irons or boiling water. The defendant would be 'tested' by applying one of these to his body. If an injury resulted, he was ruled guilty. If a higher power intervened and prevented the injury from showing, the defendant was innocent. In the barbarian law codes, which were prevalent in Western Europe prior to 800 AD, the ordeal served as an important means to decide difficult cases. When no conclusive evidence could be gotten, a man could only await judgement:

"O God, the just judge, who are the author of peace and give fair judgement, we humbly pray you to deign to bless and sanctify this fiery iron, which is used in the just examination of doubtful issues. If this man is innocent of the charge from which he seeks to clear himself, he will take this fiery iron in his hand and appear

unharmd; if he is guilty, let Your most just power declare that truth in him, so that wickedness may not conquer justice but falsehood always be overcome by the truth. Through Christ.” (Bartlett, p. 1)

The ordeal served as the answer to the most uncertain of cases, when other ways of discovering the truth were not available. The concept of justice implied by this method is interesting. The trial by ordeal never produced a false result; it was, at the time of its reign, completely infallible. Justice was viewed as an absolute, with clearly defined areas of right and wrong. It is important to note that the ordeal was used in a much different system than what is now known. During the Middle Ages, an inquisitor rather than accusatory system was employed. In this type of judicial procedure, the defendant was charged by the court, as opposed to the plaintiff, and had to prove his innocence. One can see the implications of being accused by the courts if trial by ordeal is necessary. Under an accusatory system, the court only hears disputes brought before it by the plaintiff, who has to accuse a defendant.

Fortunately, the ordeal did not last forever. People began to notice that the results were often false, and started to doubt its legitimacy. It remained as the last resort for attaining justice until 1215, when a papal declaration forbade it. There were various methods of judicial procedure that filled the gap, but the most popular was torture. It served to extract a confession from a defendant. Under Roman law, which had become more widespread during the Thirteenth Century, torture became a defined practice. Lower classes of people were subjected to such proceedings, but higher classes or clergy could avoid it by sending a proxy in their place. As one can see, an inquisitory system that employed torture could get any confession from any defendant. Torture does not represent an ideological separation from the ordeal; the underlying principles are the same. The right answer could always be reached, and the system was infallible. It was not until the validity of the system was doubted again that it changed. When torture and the ordeal were removed from judicial practice, an important change in the concept of justice was made. It was no longer believed that a court could always find the correct answer, or have any system able to work all of the time. Essentially, justice was understood to be fallible. Once the concept of fallibility was introduced, it drastically altered the purpose of a justice system. Furthermore, also changing the practice of justice. Of the many

varied methods that arose following the prohibition of the ordeal, the English procedures are most important to our system.

In regards to civil law, the two main English contributions have been the jury trial and the common law. Although they were both quite different at their inception, mention of these two institutions can be found as far back as 1000AD. At that time, the common law of England was not written down. It was simply the general rules and beliefs held by the people on how to conduct themselves in a society. The common law governed much of the behavior in inter-personal relations. It upheld beliefs such as the necessity for debtors to pay creditors, tenants to pay landlords, and punishment for trespasses. Many highly detailed and structured laws in our present society began as English customs. The jury did not start out with same function that it now serves. The original purpose was to have twelve men from every village, called a jury, report any guilty people to the authorities (Roche, p.50). The fact that these two legal institutions have survived, through many changes, is surprising. Their underlying judicial principles are important to the function of a legal system, and important to understand.

The common law began as a set of social beliefs, and although they were common to most Englishmen, they were only considered law in the Royal Courts, the courts of the King. The Medieval man had a choice of courts to which he could bring a complaint, each of which had specialty areas but no clear jurisdiction. Regional courts of the counties, towns, and burrows administered more local law. Baronial courts dealt with issues concerning feudalism, and the church courts dealt with marriage, divorce, and matters of faith. The Royal Courts could presumably claim jurisdiction over everything, but they did not start out with that much power. The courts of England were more akin to competitors than to colleagues, and they survived off the settlements made. Due to the fact that the common man had a choice of which court to go to, the amount of business a court received depended on the amount of faith the people had in it. This faith stems from the predictability of outcomes and the ability for the commoner to receive a fair trial; all of which adds up to legitimacy. Legitimacy is a key issue in the survival of the law and the courts that uphold it. It is important to note here who considers these laws legitimate. The feudal lords, including the king, considered their judgements as inherently right and infallible. The same can be said for the church courts, which believed their judgements to

be handed down from God. However, the common man, who was the lifeblood of the courts, had a different perspective. He did not always consider that the outcomes of the trials were correct. Therefore, by virtue of his ability to choose, he would bring his complaint to where he would expect to get the fairest trial. This demonstrates that the idea of fallibility was starting to enter the court system and effect the overall function.

The Royal Courts had a decided advantage over their competitors, and a huge impact on the development of the common law. These courts had the power of the Crown to enforce their decisions. This is important because a judgement that is not enforced bears no impact. This power became a valuable asset as the English law was being codified. The enforcement of the written law, by the Crown, gave much legitimacy to the law and the courts that supported it. The common man saw a more predictable and structured system in the Royal Courts. Predictability and structure are necessary for the function of an optimal system. This increase in complexity allowed for the development of the Writ System.

A Writ is a legal document in which a plaintiff requests another man to pay for a transgression, or appear before a King's judge. A Writ was very specific; there were separate forms to protect against different transgressions. For example, there were different writs for the recovery of stolen property, to claim a debt, or to enforce a contract. Each writ represented a right, protected by the King, that an Englishman could rely on. The English common law changed from a social belief to a codified law through the Writ System.

During the years 1189 to 1307, the Writ system and the Royal courts expanded rapidly. The first collection of writs, called a register, was recorded in 1189. It contained 39 writs. By 1307, there were 471 writs enforced by the Crown. This represents a very large rise in the number of rights given to the common man, but also demonstrates a dramatic change in the law. The law grew in complexity in order to protect a growing society. This system constituted the heart of the civil law, and it was the most consistent legal system a common man could choose. The King was able to present his version of law to every citizen, while circumventing the church and Baronial courts, through the institution of the counties. Every county in England had its own court, but they were all under the jurisdiction of the Crown. The courts also had sheriffs, a means with which to

enforce their decisions. The Royal courts were able to steal enough business from other courts to eventually starve them into extinction. Through this process, the common law became the prevalent civil code, and it was later adopted by the United States of America.

Perhaps the most influential institution borrowed from England is the jury trial. Although the precise function of the jury has changed drastically, the underlying principle has remained the same; twelve minds are more likely to find the correct answer than one. During the late medieval and early modern period, the jury served as an evidence-gathering tool. It was believed that if twelve men were taken from the town where the transgression took place, they would already be familiar with the occurrence. The Royal Courts employed the jury sporadically throughout the Twelfth and Thirteenth centuries, but civil cases were still commonly solved by combat. It was not until the end of the fourteenth century that the jury took over and began to function in a familiar manner. The jury would give the verdict, while being counseled by the judge on matters of law. As English society grew and became more complex, the duties of the jury became more specific. By the mid-sixteenth century, the jury was no longer performing any gathering of evidence. This removed the jury from first hand knowledge of the case. Their role increasingly became evaluations of evidence that they had to assess for validity. However, they retained the power to include their personal beliefs in deliberations through the mid-seventeenth century. Although the system was not yet completely impartial, the direction that the jury was developing in alludes to the fact that the people felt that a more effective system is less biased.

The Scientific Revolution of the seventeenth century had a distinct effect upon the concept of fallibility in the courts. In 1563, legislation was passed that made perjury a crime. This contradicts the belief that an oath before God is infallible. The credibility of witnesses was no longer based upon their social status, as it had been. Instead founded upon their relationship with the matter at hand. During this time, the idea of probability entered into the law. In questionable cases, the jury was instructed to decide for the side that was most probably telling the truth. This served to minimize the number of mistakes made by the courts, but not their severity. By the end of the Scientific Revolution, proven

fact became the most important consideration for the jury. After this time, the changes in the function of justice all reflect the concept of fallibility.

The use of the jury trial served several purposes in our society. Primarily, it was used because it has proven to be as effective in deciding cases as anything else. Also, it helps to legitimize the system. The inclusion of average people in the judicial system allows them to see it work and lets them influence it, thus increasing their faith in the system. Also, by randomly selecting the jury, the populace is most fairly represented. This results in a direct relation between social beliefs and judicial decisions. For the law to survive, it must reflect the general social values. An impartial jury is a democratic institution; it treats all men equally under law and prevents the powerful from abusing the system. This characteristic was very desirable to the men who created the system. After the American Revolution, a democratic sentiment was prevalent. This sentiment bore strong influence on the formation of the present civil justice concepts. When England first started to colonize America, it had no idea what to expect from the new lands with regards to law. The colonies were established with only a general outline of judicial procedure; only when the colonies grew in size and complexity was there a need to change anything. The motivations behind this change are apparent as the colonies grew more problems would arise. Common disputes indigenous to the colonies found the legal system inadequate to resolve the legal issues. Law was, therefore, specific to the individual colonies, changing as their needs arose. This variety allowed for the development of thirteen different judicial systems for the thirteen different colonies. A good example of these colonial courts is well found in Massachusetts Bay Colony.

The charter of the Massachusetts Bay company, established in 1629, modeled the first form of government in the colony. It acknowledged the fact that there was land and therefore a need for government. England then granted law-making power to the said company. The charter set up two courts of law. The General Court and the Court of Assistants. The General Court was comprised of officers of the company and all freemen. The court of assistants was comprised of the Governor, deputy Governor, and assistants. These courts handled most common affairs for the colony. As the colony grew, more freemen joined the General Courts. When they became big enough, as the charter specified, they began governing. The system later eliminated people associated with the

company and formed an elected body (Friedman, p.38). The procedural details of the court system at this time are not entirely relevant to this discussion. It is important to note that the system started out as a general judicial body and began to evolve towards a more complex system of courts as there was need.

During the eighteenth century, the judicial bodies of the colonies looked differently than earlier colonization. These changes were brought about by England's attempt at establishing its law and procedures as the predominant judicial procedures for the colonies. Despite England's attempt, the county courts still served as effective governing bodies of the separate districts. In the beginning of the eighteenth century, England granted the governor of each colony the power to appoint court officials. Towards the middle of this century, there were nine courts of this type established in the colonies. These courts were modeled after English procedure, but did not include a jury. The colonists felt the need for a jury as a voice for the colonies in the English courts. The laws and the courts established after this time period only added to American distaste for the English. This dislike for the English contributed not only to the American Revolution, but also to the motivations behind change in the legal system. The issue over the jury was related to the colonists not having representation in their own government. When America gained control over the courts, similar courts to that of the original English courts were established. The only difference was that they included a jury, which has since become a staple of our legal system. (Friedman, pg. 48 – 55).

After the American Revolution, the country was left with the task of organizing its government and legal system. After much debating, the constitution was written in 1787. One critical decision regarded the procedure of laying down the law. The English courts, although resented, offered valid ideas. The strong resentment towards the English courts, along with the desire to find effective law, led American judicial procedures to develop new ideas in conjunction with established practices. After the Revolution in 1776, the first Continental Congress instituted a declaration of rights. This declaration stated that the States were, "entitled to the Common law of England". The declaration continued by saying English statutes which "existed at the time of colonization; And which they have, by experience, respectively found to be applicable to their several local

and other circumstances,” should be applied. (Friedman, pg. 109). This statement’s intent was to keep English law that, by experience, worked and omit laws that did not.

Some states started to show signs of wanting to remove British laws from the books completely. In 1799, New Jersey passed a law that states:

“ No adjudication, decision, or opinion, made or given, in any court of law or equity in Great Britain [After July 4th, 1776] ... Nor any printed or written report or statement thereof, nor any compilation, commentary ... Shall be received or read in any court of law or equity in this state.”
(Friedman, pg. 111-112).

America was new; it wanted new laws and ways of thinking. The ideas of basic human rights and the freedom of the individual opened new avenues of thinking. This allowed for concepts and procedures to develop towards the current legal system in America. Many people in America had complaints about the old practices in the courts. There were issues about the rich verses the poor, inadequacies for regulating business, and the inability of the law to meet the changing needs of a growing society. The law has to be dynamic, meaning able to change. With the establishment of new American legal practices, the needs of the society were being met. The majority of people in America could be effectively governed under these laws. This was a far cry from the courts of Britain which were numerous and cumbersome. More advanced judicial practices and implied concepts of justice were taking shape.

During the nineteenth century, states began implementing State constitutions. An inspection of these constitutions reveals some important concepts in regard to changes in civil law changes around the time of the American Revolution. After the federal government adopted a constitution, the State governments followed with similar documents. These constitutions were essentially smaller versions of the federal one, with State specific laws and regulations. This idea is important in the progression of our legal system, and legal concepts, to this day. The New Jersey constitution established in 1776, worded their need for a constitution in this manner:

“ In the present deplorable situation of these colonies, exposed to the fury of cruel and relentless enemy, some form of government is absolutely necessary, not only for the preservation of good order, but also the more effectually to unite the people, and enable them to exert their whole force in their own necessary defense.” (Friedman, pg. 113-114)

An important goal stated in this quote is the purpose of uniting the people through government. The constitutions were viewing the law as a system with a large amount of potential power to protect the people it represented. The quote clearly indicates this by stating that this organized body of government would enable America to exert its whole force on its behalf. With the implementation of the State constitutions, the American legal system headed towards a centralized judicial process. Even States that had differences in their constitutions held similar goals and ideals. The codification allowed for the American government to become an effective tool for the resolution of America's disputes. (Friedman, pg. 115-116)

An important but brief step in bridging the gap between civil (equity) law and the rest of the American legal system was the introduction of the Field Code in 1848. The Code, named after David Dudley Field, was important in establishing law based upon equity. It is not important to look at the details of this Code, but rather it's modifications. Equity law in America, prior to this time, was evolving slowly. The civil courts were still unorganized, and America began to realize the need for this to change. With the implementation of the Field Code, America was on the way to a well-defined and established procedure for dealing with civil disputes. (Friedman, pg. 391)

The next important change in the American legal system occurred during the Civil War. The United States became fractured, and laws changed as a result. The southern States adopted their own constitutions and the northern states maintained theirs. At the end of the Civil War period, there were noticeable differences in the codified law. These differences are not unlike the difference between pre and post British control in America. What is important are the changes made to the constitution during this period. At the end of the Civil War, three Amendments had been added, Amendments Thirteen, Fourteen, and Fifteen. The Fourteenth Amendment is the most relevant to this discussion. It states:

“All persons born or naturalized in the United States were ‘citizens of the United States’ and of the State wherein they reside. No state could ‘abridge’ their ‘privileges or immunities’. No state could deprive any ‘person’ of ‘life, liberty, or property, without due process of law’; nor could a state deny ‘to any person within its jurisdiction the equal protection of the laws’.” (Friedman, p.346-347)

These statements give individual rights to everyone, no matter what. Under this Amendment, the civil system incorporated a non-biased atmosphere in the courtroom. It was realized that the system must be insensitive to a person's economic or social standing. This relates to the belief that every citizen deserves to be treated equally under the law. Another important conclusion to draw from the Civil War period is that the Constitution had proven itself. Even though the constitutional system had encountered problems, it survived because of its ability to adapt. This demonstrates the value of a dynamic system.

The civil justice system underwent two important reforms during the nineteenth and twentieth centuries: the Tort Law Revolution and the introduction of punitive damages. Both of these represent a change in the function of justice. Tort Law reform came about in the nineteenth century. Tort Law deals with civil wrongs that result in death, personal injury, or property damage. During this time period, the country was undergoing significant industrial growth. Many new manufacturing processes were being developed, and with these came new possibilities for physical harm. The Tort reform came about in order to allow more freedom for industrialists to take risks. During this period, "no longer was one responsible for all injuries caused by one's actions." (Tarr, p.383) The concepts of negligence and foreseeability were introduced in order to lessen the liability of factory owners. The employer was only responsible if the injury was considered foreseeable; that is if it was recognizable that the accident could have happened before the fact. The change in the law made a lot of economic growth possible, and it demonstrates an important characteristic of a judicial system. The effects of judicial rulings are widespread, and can help or inhibit the overall performance of a society. The judicial system must take into account the role it plays in a society, and behave in the most beneficial way. The introduction of punitive damages is also a result of the justice system's role in society. Punitive damages are heavy fines imposed to punish defendants for severe harms. The system is using its wide-ranging power to prevent certain harms from happening again. Each of these two changes illustrates how the perception of justice has changed in recent times. The judicial system has been recognized to be an influential part of society, and its function should reflect this.

Throughout history, there have been many varied procedures used to resolve civil disputes. This points to the fact that none of them have been perfect. Although no system will last perpetually, some of the judicial concepts they contain have proven themselves to be valuable, if not necessary, to a system. The present U.S. judicial system is a sum of the effective concepts. The first concept discussed above, which profoundly affected the administration of justice, is that of fallibility. No system can always be right. With that in mind, concepts developed which helped an imperfect practice survive. Each of these is desirable in an optimal system. A society's civil laws, which define civil justice for that society, must be written down, or codified. The law must be predictable and consistent; equal harms should result in equal punishments. Furthermore, the consistency must extend to all people, regardless of race, creed, gender or wealth. Another vital concept is related to evidence. A court's ruling should be based upon proven fact and undisputed testimony. As society grows, the judge and jury become further removed from the disputed events, knowing the validity of the evidence is crucial in determining the truth. Also, the growth of society should be reflected in its legal code. A more complex culture requires a more complex and clearly defined set of laws. These laws must have the ability to change in order to keep pace with the society. History has shown that a legal system must be dynamic in order to survive. This alludes to another important concept: the law must reflect the general social beliefs. The populace must believe in the law in order to remain lawful. The last concept discussed here relates to the judiciary's role in society. The law should account for the ability of judicial rulings to help or inhibit the future status of the society. Overall, this historical analysis has shown that an optimal system is dynamic, unbiased, clearly defined, forward thinking, and based upon factual evidence.

Principles of Justice

Through a historical analysis, it has been shown that it is impossible for a justice system to always find the correct answer. Yet it is a basic function of a civil justice system to resolve disputes between citizens peaceably. Also, in order for the system to function, it is necessary for the populace to have enough confidence in the system to bring their grievances to the courts. This is a basic precept of an accusatory system. Confidence in a system originates from an individual's belief that the outcomes are righteous, and it is also a key factor in determining the strength of the system. Without enough confidence in the system, the populace will cease to bring their disputes before the government. This would result in a collapse of the justice system. This must be prevented, but, as was stated above, it is impossible to always provide the correct answer and achieve full confidence in the system. If the civil justice system cannot resolve disputes righteously, what then should its intention be?

No matter how formalized or structured a system is, there will always be an area that it cannot define clearly. These are cases in which, after full examination of the evidence, there is no clear guilt or innocence. Although the majority of cases can be decided upon the weight of the evidence, a system cannot ignore the cases that are tough to resolve. These cases may be a small percentage of the entire workload, but for a large system, such as the U.S. Judicial System, they make up a sizeable number. With a general goal of maintaining the highest level of confidence and stability, it follows logically that the civil system must provide the correct result the greatest amount of the time, while minimizing the effect of false outcomes. To do this, it is necessary to examine the function of justice itself. Justice within a legal system exists on two levels, both direct and indirect. Direct justice relates only to the specific plaintiffs and defendants involved with the case. Indirect justice relates to the impact of a decision upon the general populace, and the harms that could result from it.

How direct justice issues are dealt with is the most important characteristic of a civil justice system. To clarify the concept of direct justice, some explanation is needed. On a basic level, the civil system consists of one person, a plaintiff, claiming that he received a harm from a second person, a defendant. First, it must be decided who is right

and who is wrong. Second, if the defendant is found to be at fault, he must compensate the plaintiff. These two acts, the verdict and the compensation, comprise the concept of direct justice. In regards to the verdict, the most important aspect is who has the power. Fundamentally, does any one person have the right to decide that another person is at fault? In order to preserve a lawful society, someone has to have that power. The power of the verdict is given to the government because it is best suited to be an impartial mitigator. It can resolve disputes based upon the rule of law as opposed to personal beliefs. Also, the verdict should be based upon the evidence and witnesses presented. This will place the power of justice further away from the influence of any single person and into a formalized structure based upon fact. A structured system has the most potential for providing consistent results. The strength of a system is heavily based upon consistency; it boosts both confidence and stability. Therefore, it is most just and beneficial to place the power of the verdict in the government's hands.

The verdict is one part of the concept of direct justice, the other one being the compensation for wrongdoing. Direct justice is termed 'direct' because it deals solely with the persons directly involved with the dispute, the plaintiff and the defendant. In a civil case, the dispute is typically due to an alleged harm. For lack of a better medium, this harm can be measured by an amount of money. In effect, the money is a measure of the amount of injustice. On a fundamental level, the injustice is what a justice system must focus on. Rather than dispense justice, the system should minimize the effects of injustice. This is true because of two facts: first, harms will occur and create disputes, and, second, that the correct answer cannot be found for all of the disputes. In order to minimize the result of a harm, the plaintiff should be compensated. Fundamentally, the plaintiff is being brought back to his condition prior to the harm; in a sense he is being made whole again. The direct justice concept is, in part, the payment of compensation in order to make a victim whole again. In total, the concept is both the power of the verdict and the payment of compensation. In a civil system, the application of direct justice should be done with these underlying principles in mind. The power of the verdict, the ability to directly judge someone, must treat all people equally and be accessible to everyone. The payment of compensation must be done with a goal of minimizing injustice and making someone whole.

Up to this point in the discussion, the principles that guide the function of direct justice have been examined. It has been shown that these principles pertain to people in the courtroom; but now let us look at justice on a larger scale. The judicial system is an integral part of a society. It has broad powers and influences many aspects of a citizen's life. Such a powerful characteristic cannot be ignored in a system, it must be accounted for. Every ruling made in the courtroom either sets or obeys a legal precedent, a standard that can be used in future cases. In a sense, the application of direct justice affects how it can be applied in the future. The law becomes a dynamic entity, constantly changing to incorporate its own decisions. Through this characteristic of the law, every case has the potential to influence similar cases in the future. By extending this line of reasoning, one can see that the action that caused the original dispute affects the action that might cause a later dispute. If the latter action could be affected in the right way, it could be stopped from occurring altogether. On the other hand, if affected negatively, it could promote civil injustice. A justice system must consider the results of any ruling it makes; whether it will create future injustice or deter it.

The effect of the judicial system upon people not directly involved with a case, and their future actions, is termed indirect justice. This concept recognizes the fact that a judicial system is not isolated from the society it serves. Contrarily, it is intertwined with virtually all aspects of daily life. Fundamentally, the purpose of indirect justice is to deter future injustice. As stated above, one application of direct justice affects the next. The optimal impact of the first application of justice is to stop the second from ever having to occur, which can be achieved through payment of damages based upon indirect justice principles. Again, due to the lack of a better medium, money will be used to facilitate the function of indirect justice. These payments are analogous to the punitive damages awarded in the present U.S. judicial system.

It is important to note that not all cases require punitive damages. Punitive damages should be used only when the harm can be deterred from happening again. For example, consider the two following situations: One, a toy company produces a faulty product that injures a child; and two, a man runs over a dog. Aside from compensating the child's family, the company in the first situation must be stopped from ever doing this again. There is enough potential for a reoccurrence of the situation, and it could result in

such widespread harm, that the courts should take steps to prevent it. This points to a defining characteristic of indirect justice and punitive damages. Their use is directly related to the number of people who would be endangered if the harm were repeated. In a sense, the use of indirect justice serves to protect the populace from the potential of future transgressions. It appears that punitive is a misnomer; fines of this nature do not punish as much as they protect. In the second example situation, there is no threat to the general public. If someone's dog is run over, it is unfortunate, but does not require punitive damages. The harm cannot be prevented, or the public be protected, by imposing fines in excess of the compensatory damages. Punitive damages must be used with care; they should only be employed with the intent of deterrence and public protection.

It is known that every justice system is fallible. In order to design an optimal system, this region of fallibility has to be minimized. The principles of justice provide a guideline for how this should be done. By applying these principles to the uncertain areas, a consistent, stable, and optimal system can be designed. First, let us define, in very broad terms, the areas of fallibility. When a plaintiff brings a charge against a defendant, there are two general questions to be answered: was the plaintiff harmed, and did the defendant do it? If both of these can be answered without a doubt, then there is no chance for a false outcome. If either of them cannot be answered with one hundred percent certainty, then the case is in the region of fallibility. The second question, which is typically the more difficult, will be examined first. In order to limit the discussion to one variable at a time, it will be assumed that the plaintiff was harmed.

Through the weight of evidence, the probability of fault can be found for a defendant. This is also the probability of being able to judge him correctly. False judgments are unjust, and the probability of their occurrence can be used in conjunction with the original harm to tally the total injustice. To illustrate this, consider the two following simplified examples.

- 1) A case consists of three defendants and one plaintiff, and through the examination of evidence it is proven that one of the three defendants caused harm to the plaintiff. Therefore, each defendant has a $1/3$ chance of being at fault.

- 2) A case consists of one plaintiff and one defendant, and it is proven that the defendant has a $1/3$ chance of being at fault.

The two situations appear very similar, but there is an important distinction. In the first, it is known that the defendant at fault is in the courtroom, and in the second this information is unknown. There are three possible methods in which to settle the dispute: first, find totally in favor of the defendant(s); second, find totally in favor of the plaintiff; third, find partially in favor of both the plaintiff and the defendant. These shall be designated D, P-Total, and P-Partial, respectively. To determine which method is most in agreement with direct justice principles, it is helpful to measure the amount of injustice contained in each. The harm, and hence the injustice, can be assigned an amount, M . In the following chart, the injustice for each method is shown for the first example case.

	Find for Defendants	Find for Plaintiff- Total	Find for Plaintiff- Partial
Plaintiff	M	0	0
Defendant 1	$M/3$	$(4/9)M$	$M/3$
Defendant 2	$M/3$	$(4/9)M$	$M/3$
Defendant 3	$M/3$	$(4/9)M$	$M/3$
Total Injustice	$2M$	$(4/3)M$	M

Table 1. Injustices for Example Case One

The injustice for each person is measured in accordance with the concept of being made whole. For the plaintiff, this means compensation; but for the defendant it means payment of compensation. In total, it alludes to the fact that it is unjust to be both wrongfully deprived of anything or wrongfully in possession of anything. For the first and third methods, the injustice for the defendants is averaged over all of them, because it is impossible to know who is actually at fault. The injustice is also averaged for the P-total case, but slightly differently. To find totally in favor of the plaintiff, one of the defendants would have to be chosen arbitrarily. The correct one would be picked a third of the time, and this would result in no injustice. For two thirds of the time the court

would choose an innocent man, who would have to pay \$M of compensation. Choosing the innocent man would also let the guilty man go unpunished, which is equal to M injustice. In total, the P-Partial method doubles the injustice two thirds of the time. This results in an average injustice of $\frac{4}{9}M$ for each defendant.

The injustice for the second example case is examined in the following table, under the same guidelines as the first example. Both of these tables will be used to determine which of the three methods is best used to answer the question of the defendant's guilt.

	Find for Defendant	Find for Plaintiff- Total	Find for Plaintiff- Partial
Plaintiff	M	0	$(\frac{2}{3})M$
Defendant	$M/3$	$(\frac{2}{3})M$	$(\frac{2}{9})M$
Total	$(\frac{4}{3})M$	$(\frac{2}{3})M$	$(\frac{8}{9})M$

Table 2. Injustices for Example Case Two

The injustices in this table are calculated in the same manner as before. An uncompensated plaintiff is unjust, as well as a wrongfully punished defendant.

Now, there is a quantitative measure of the injustice for the three methods of settlement, each can be discussed according to the concepts of justice. The D method involves finding all defendants innocent. In both examples, there is a chance that the defendant(s) did do it, but each one probably did not. Because each man cannot be proven over fifty percent at fault, should they all be found innocent? This approach yields an injustice greater than that of the original harm. The plaintiff was wrongfully harmed and not compensated, while the person at fault is let go. The primary function of a civil system, to resolve disputes, is not accomplished. Rather than minimizing the injustice, it is compounded. This is the approach taken by the U.S. system, and does not appear to be the best.

The P-Total method involves placing the entire fault on one defendant. This has a slightly different meaning for multiple defendants as opposed to single defendant cases, but the principles can be applied the same way. In both cases, the defendant is most likely

wrongfully paying the damages. The plaintiff is being compensated, which minimizes some harm, but at the unjust expense of the defendant. Furthermore, in example case one, the judge arbitrarily chooses the guilty man. This places the judge in a biased position, it does not allow him to be an impartial mitigator. He is no longer qualified to fairly wield the power of the verdict.

The P-Partial method involves placing a share of the blame upon the defendant(s). The share of the damages is proportional to the probability of guilt. In a situation when the person at fault is known to be a defendant, all of the damages will be paid to the plaintiff. When it is unsure if the defendant did it, the plaintiff is partially compensated. This method allows for the possibility for injustice to occur to both the plaintiff and the defendant, but the total injustice is less than that of the other methods. Also, because the probability of guilt is based upon evidence, the judge can incorporate it in the ruling and still remain impartial. Overall, the P-Partial method minimizes injustices, allows for some compensation without overly penalizing the defendant, and preserves the impartiality of the judge.

In certain cases, there is a question as to whether the plaintiff was actually harmed. Once again, not being able to answer this question with complete certainty allows for the possibility of a false ruling. The concepts of justice apply to this aspect of fallibility in much the same way as to the question of the defendant's guilt. There are three possible rulings for this situation: completely in favor of the defendant, completely for the plaintiff, or partially in favor of the plaintiff. In order to determine how well each of these methods handles this aspect of fallibility, they will again be examined in tabular form. The method that produces the least injustice, while still providing due compensation and an unbiased trial, is the most desirable. As an example case, consider a plaintiff who claims to be owed a sum of money. Through examination of bank accounts and other relevant evidence, it is concluded that there is a one third chance that he did lend the money to the defendant. (Further details of the case are not necessary, as they do not affect the outcome.) Let the injustice be designated as M , and equal to the disputed sum of money.

	Find for Defendant	Find for Plaintiff- Total	Find for Plaintiff- Partial
Plaintiff	$(1/3)M$	$(2/3)M$	$(2/9)M$
Defendant	$(1/3)M$	$(2/3)M$	$(2/9)M$
Total Injustice	$(2/3)M$	$(4/3)M$	$(4/9)M$

Table 3. Injustices for Example Case Three

As one can see, the P-Partial method yields the least injustice. This is due to the fact that the other two methods are too extreme in their rulings. If the defendant is found to not be at fault at all, then the plaintiff is not compensated and a possibly guilty defendant is let go. If the plaintiff is found to be completely right, then the ruling is false two thirds of the time, regardless of whom the defendant may be. By partially compensating the plaintiff and partially penalizing the defendant, there will always be some amount of injustice, but, over a large number of cases, this injustice is minimized.

No civil justice system can be perfect. However, an optimal system can be formed once the desired characteristics are defined. Primarily, the system's objective is to minimize the injustice. The concepts and principles of justice provide the guidelines for the behavior of such a system. The system must be able to handle clear decisions as well as unclear, and both consistently. By analyzing general areas of fallibility, it has been shown how a system can best deal with difficult disputes, in which there is no known right answer. It is best for a civil system to use partial rulings when there is only partial certainty. The amount of injustice inherent to a system is minimized when the system makes rulings based only on facts. When the facts provide only a probability of fault, then the ruling should reflect that partial fault.

The New Compensatory System

The United States Civil Justice system, as previously mentioned, deals with certain cases in an unsatisfactory manner. The precept of ‘preponderance of the evidence’ is interpreted by this system to mean that any defendant who is over fifty percent at fault must pay all the compensation. In the previous section, it was shown that this method yields the greatest amount of injustice. Our compensatory system is designed around awarding the plaintiff with partial compensation in relation to the probability of guilt. It does not contain a set cutoff line of fifty percent, but rather it is a dynamic system that is sensitive to many various cases. This yields the least amount of injustice. Our proposed compensatory system is composed of two levels, each of which can be applied to single or multiple plaintiffs and defendants. The first level accounts for the question of whether the plaintiff was harmed, and the second accounts for the probability of the defendant’s guilt.

The first level is designed to eliminate frivolous cases. A frivolous case is a lawsuit in which the plaintiff has not been harmed but is suing the defendant regardless. If we remove such cases from our system, we can effectively decrease wasted time and clutter from our civil system. A question that must now be answered is how to determine which cases are frivolous. When we first addressed this question, we felt that assigning a “probability that the plaintiff received a harm” to the plaintiff was appropriate; this variable will be referred to as p_harm . When this percentage is low enough, there would be little or no compensation awarded to the plaintiff even if the verdict favored them. If the plaintiff is awarded little or no compensation, there is no reason to judge that case in the first place. In order to finalize the first step, we need to assign a fixed cut-off percentage to our variable, p_harm , below which a suit would be deemed frivolous and not admitted into the court. When we first thought about this percentage, we decided that it should be a low number such as 20%. If this number were assigned to our cut-off percentage it is obvious that quite an impressive amount of time would not be wasted by the civil system. However, this infringes on a citizen’s basic right to always have access to the court system. Our conclusion was that the cut-off percentage for p_harm was to be

set at 0%. If a citizen has any chance of compensation, that citizen must have the right to bring the case to trial. Cases with a p_harm of 0% are regarded as frivolous and are not considered in our compensatory system.

The variable p_harm represents the uncertainty the court has in whether or not the plaintiff was actually harmed. Obviously, the court will not always be able to award the correct amount of compensation to the plaintiff if it is uncertain how much the plaintiff was actually harmed. When the court determines the amount of compensation to be awarded, our medium being money, it can then apply our uncertainty variable to that total amount. If we were to multiply our total compensation by a percentage we would get a number less than the original compensation. This percentage would be represented, so to speak, in the new number. If we wanted to represent the amount of uncertainty in a given case, we could multiply our total compensation by p_harm , our uncertainty percentage. For example, if the plaintiff involved in some case was found to have a p_harm percentage of 33% and a total possible compensation of M dollars then the maximum compensation that could be awarded would be equal to $p_harm * M\$ = .33M$.

In order for our compensatory system to be effective in dealing with specialized cases, we must allow for the possibility of more than one plaintiff. If multiple plaintiffs were to bring a case to trial then there would need to be a relationship that these plaintiffs share with the defendant(s). Because of this there will still exist a general p_harm for all of the plaintiffs. This variable will represent the uncertainty the court has in whether or not the plaintiffs as a whole received a harm. After a total possible compensation has been determined we have to address how to split that compensation fairly among the plaintiffs. In a simple case, where there existed no obvious differences in how each plaintiff was harmed by the defendant(s), we would simply divide the compensation equally among the plaintiffs. Each plaintiff would receive $1/N$ of the total compensation, where N represents the number of plaintiffs in a specific case. When there are differences in how the plaintiffs were harmed, we can divide the awarded compensation by relating it to the original compensation asked for by the plaintiffs. If we determine what percentage of the original compensation each plaintiff was asking for, we could give each plaintiff that exact percentage of the awarded compensation. In most cases, the plaintiffs will most likely have an equal percentage of the compensation. In the cases where the plaintiffs do

not have an equal share, this approach will effectively distribute compensation among the plaintiffs fairly.

The second level of our total compensatory system deals with the uncertainty the court sees when looking at whether or not the defendant actually caused harm to the plaintiff. This uncertainty can be represented in a variable, d_harm . This variable represents the uncertainty the court has when analyzing whether or not the defendant actually caused harm to the plaintiff(s). To better clarify the reasoning behind this variable, we will look at an example. If a number of people in a small town begin getting cancer and a company is polluting the water supply with a carcinogen, there are a few facts to look at in order to place a percentage value in d_harm . Suppose that the evidence provided in the case proved that the cancer rates in the town doubled after the company began polluting the water. That would mean that 50% of the plaintiffs would have probably gotten cancer anyway. The uncertainty, or d_harm , in this case would then be 50%. If we combine our two uncertainty percentages by multiplying p_harm and d_harm , we can accurately represent our total uncertainty in the total compensation. To apply this to the previous example, let's assume p_harm is 100%, implying the fact that the plaintiff actually has cancer. If we also assume a total compensation of M dollars then the maximum compensation the plaintiff could receive would be $p_harm * d_harm * M = 100% * 50% * M = .50M$. This idea, simply stated, means that if the court is only fifty percent sure that the defendant(s) caused harm to the plaintiff(s), then only fifty percent of the maximum compensation may be awarded.

With only minor manipulation we can expand our general formula to account for multiple defendants. If we include multiple defendants we have to assign each defendant a $d_harm(N)$, where N represents a number from one to the number of defendants involved. This variable will represent the uncertainty in whether or not each defendant caused harm to the plaintiff(s). In order to use this information so it accurately represents what each defendant must pay, we must first relate each $d_harm(N)$ percentage around 100%. To do this we simply divide each $d_harm(N)$ by a number X. This number is determined by adding every $d_harm(N)$ and then dividing that sum by 100. The amount of money each defendant must pay is now $(d_harm(N) / X) * M$. With this method, each defendant is paying a percentage of the total compensation based on their individual

d_harm percentage. In cases where the defendants have equal *d_harm* percentages, this formula will equally divide the compensation awarded.

The New Punitive System

An optimal civil justice system contains punitive damages in order to deter future injustice from taking place. This minimizes the total injustice inherent to the civil system. In order for our punitive system to accomplish this goal, there are a few issues it must address.

The first of these issues is on an analysis of the case on an industry wide level. If the defendant(s) involved have a high potential for interaction with society, then the judicial system must deter that defendant from causing harm repeatedly. To better illustrate this idea we can look at the McDonald's corporation. This company serves billions of customers around the world. As a result, this company has a high potential of interaction with society. However, another company, such as a local restaurant, would not have the same potential for interacting with society.

The second area is that of foreseeability. Foreseeability is related to the likelihood that the harm could have been recognized before it occurred. The judicial system needs to be respected by all citizens. If people cause harm, knowing full well that they are doing it, then the system needs to deter them from that behavior. This deterrence consists of two areas. The first area is the number of people harmed by the defendant(s). The second area is the severity of the harm caused.

The third issue is that of payment capping. In order to treat all defendants' equally there needs to be a way to scale the total possible amount of punitive damages that can be awarded, on an individual bases. If we take a look at the McDonald's Corporation again we can see why this is a very crucial issue. If McDonald's causes the same harm to someone as a small local restaurant, the two cases would look similar in court. However, if equal punitive damages are awarded, McDonald's will be in a much better situation because of their large net income. The amount of punitive damages awarded is not important, what is important is that each defendant in our civil system receives the same amount of deterrence for the same harm. In order to relate each defendant to the same base, we have decided that the net worth of any defendant must be considered when scaling punitive damages. Due to the fact that the underlying principle of our punitive damages is that of deterrence, we will use a probability, based upon the

issues of foreseeability and the potential for interaction with society, in conjunction with the defendant's net worth. This probability will be referred to as d_{deter} , and will be based upon proven evidence. If it is shown that either the foreseeability or the potential for interaction is negligible, then it is not necessary to award punitive damages. It would not serve to deter future injustice. The highest amount of punitive damages that the court can award will now be:

$$d_{deter} * (\text{Defendant's Total Net Worth})$$

The idea of payment capping serves to eliminate both unnecessary punitive damages and to increase punitive damages in situations that require more deterrence. This method serves to create more equality between defendants in their respective cases.

Case Study

In the following section we will use a well know lawsuit to investigate the performance of our system in minimizing injustice. We will also compare the outcome of the current United States civil system to that of our proposed civil system. The case to be analyzed is from A Civil Action, written by Jonathan Harr.

In the city of Woburn, a suspiciously large number of people, some who lived within walking distance of each other, became ill of the same disease: leukemia. One child was Jimmy Anderson, who on January 31, 1972 was diagnosed with acute lymphocytic leukemia. The John J. Riley Tannery, owned by Beatrice Foods, Inc., W.R. Grace, and Unifirst, Co. (although this company was not named in the original complaint of the plaintiffs and will therefore not factor into our analysis) had chemical factories in Woburn that lay along the banks of the River.

A report by the Massachusetts Department of Public Health, *Woburn's Cancer Incidence and Environmental Hazard* was published on this matter. It showed that, “Analysis of residence at the time of diagnosis reveals a significant concentration of cases in the eastern part of Woburn, where the incidence of disease was at least seven times greater than expected. The incidence of childhood leukemia for the rest of Woburn was not significantly elevated compared to national rates.”(p.50) Also, “The Environmental Protection Agency was attempting to trace the contaminants back to the point of origin, but that task, time-consuming and costly, would take at least another year, and probably longer.”(p.50) There were twelve incidences of this type of leukemia, eight from east Woburn, and six from Pine Street alone. These families decided to file a complaint against the companies situated on the Aberjona River. Attorney Jan Schlichtmann represented the twelve families, and, on May 14, 1982, the complaint was delivered to the Superior Court in Boston:

“The complaint asserted that subsidiaries owned by Grace and Beatrice had poisoned the plaintiff’s drinking water with toxic chemicals. These chemicals included TCE, which the complaint described as “a potent central nervous system

depressant that can cause severe neurological symptoms such as dizziness, loss of appetite, and loss of motor coordination. It can produce liver damage and cause cell mutations and cancer.” The poisoned water, stated the complaint, had resulted in the deaths of five children, and injuries to all of the family members who were party to the lawsuit, including “an increased risk of leukemia and other cancers, liver disease, central nervous system disorders, and other unknown illnesses and disease.” The plaintiffs sought compensation for these injuries, and punitive damages for the willful and grossly negligent acts of the two companies.” (p.81)

Furthermore, it has to be proven that the two companies caused the contamination in question.

The case of Woburn parallels a scenario of a Harvard Law School professor, Charles Nesson, who spent some time studying the use of statistics as evidence. He created a hypothetical case, known as the Case of the Blue Bus. In the imaginary scenario, Mr. Smith drives down a street at night and swerves to avoid a head-on collision with another vehicle. In doing so, he hits a tree and is injured, but remembers seeing a bus drive past as he sat in his mangled car. In time, he finds out that the Blue Bus Company owns 80 percent of the buses that travel that particle route. Nesson goes on to state that “there is, after all, at least a 20 percent chance that the Blue Bus Company is not guilty. But this is a civil action, where the aim is to resolve disputes in a just manner, and in civil cases the burden of proof is not as onerous.”(p.236) Like the Blue Bus Co. scenario, there were two chemical companies along the Aberjona River in Woburn and there was no way to find out which one dumped how much. The case was circumstantial but statistics could be used to determine the amount of harm inflicted by the companies.

In the case in A Civil Action, similar to Case 1 in the Discussion section, there are three defendants. Prior to trial, Unifirst settled out of court, but the other two companies, Beatrice Co. and W.R. Grace, were taken to trial. The same case that was brought before the U.S. judicial system, with twelve plaintiffs and two defendants, will be analyzed using our system. Under the U.S. code, it was proven only after the trial that the two companies were guilty of contaminating the wells that were causing illness in at least twelve families. A post- trial settlement was reached, and this settlement will be compared to the outcome from our system.

The first step is to determine if, in fact, a harm has been inflicted. Since there was an increase of seventeen percent in cancer deaths during a five-year period and it has

been diagnosed by medical doctors that the twelve people named in the suit definitely have leukemia, we can safely conclude that our value of $p_harm > 0$. This value can be assigned based on the information provided in A Civil Action, p. 42: “The American Journal of Medicine in 1963...wrote: “The cluster of eight cases of leukemia among children...cannot reasonably be attributed to the effects of random distribution. These cases constitute a clearly defined micro-epidemic.” More evidence that points to this conclusion is the fact that groundwater pollution attributed to the illness of people in the town of Woburn. Just over twenty one percent of the water that the leukemia infected people used came from the wells in question, while only 9.5 percent of the water used by those not infected was from this aquifer. This further implicates that pollution in the aquifer that lies below the land inhabited by the two companies, W.R. Grace, Co. and Beatrice, Inc. was to blame for the harm inflicted upon these individuals. The people involved in this case clearly have leukemia, and there is significant cause to believe it was not caused naturally. Clearly, this is not a frivolous case, therefore we can assign a value of p_harm equal to **100** percent.

Next, we must determine the likelihood that the two companies involved in this case are to blame for the contamination that caused the leukemia. There was a seven-fold increase in cancer in the mid-1970’s, the years in question. This number means that one out of every seven people would have gotten leukemia naturally. Furthermore, six out of those seven people got cancer as a result of the contamination. The probability that the defendants caused harm to the plaintiffs is therefore approximately 86 percent. The total compensation that can now be awarded in this case is:

$$p_harm * d_harm * M = 100\% * 86\% * M = .86M.$$

This d_harm value, as previously mentioned, represents the probability that the defendant caused harm to the plaintiff. This value also represents the percentage of the total compensation awarded that the particular defendant will pay. We can assume that both of the companies equally shared the blame because of the lack of any evidence that differentiates the two defendants. We are assuming that these companies are equally sharing the blame because the two companies equally shared the same amount to clean up

the Aberjona River (According to the EPA lawsuit filed concerning the pollution of the river). As a result we are also assuming that both companies dumped an equal amount of TCE into the river. Therefore, both defendants will have a $d_harm(N)$ value of:

$$d_harm(1) = 86\% / 2 = 43\%,$$

$$d_harm(2) = 86\% / 2 = 43\%.$$

Due to a lack of dollar amounts labeled in the Civil Action lawsuit, we can get an approximate amount of compensation by relating this case to a similar case involving eight families who got cancer. A company using a uranium fuel processor caused this cancer. The compensation awarded to the victims and their families was 36.7 million dollars. By utilizing these figures we can get an approximate value that the victims should be awarded in the Civil Action case. There were eight families involved in this case, and we can increase their compensation by 150% to relate it to the twelve families involved the Woburn case. The total possible compensation awarded to the twelve families totals 55.05 million dollars. By using this figure in the newly developed system, the final compensatory payment by each of the companies is:

$$p_harm * d_harm(1) * M = 100\% * 43\% * \$55.05 = \$23.67 \text{ million}$$

$$p_harm * d_harm(2) * M = 100\% * 43\% * \$55.05 = \$23.67 \text{ million}$$

Based upon the available information, our system finds both Beatrice and W.R. Grace liable for \$23.67 million in compensatory damages.

The U.S. judicial system based much of its settlement with the defendants upon an EPA report, published after the actual trial. The original suit from the twelve families was decided in the defendant's favor, but the companies were later forced to settle because of the EPA report. In this report, concerning the contaminated Aberjona River Valley, the EPA said it has removed 71 gallons of TCE and perc, both carcinogenic contaminants, and 1600 tons of contaminated soil from the fifteen acres of land that overlay the aquifer. Only one of the companies was found liable under the U.S. system, W.R. Grace, and paid \$8.5 million to the families. Another company, Unifirst, settled out

of court for \$1.05 million. Beatrice was found not liable, but did agree to pay for half of the environmental cleanup costs.

The table below summarizes the results of both our compensatory system and the United States civil system. The format is the same as that used in the Principles of Justice Section, and should for the most part be familiar. One exception is that the new system accounts for the d_harm variable. All dollar amounts are in millions.

M = Amount of Injustice

	United States Civil Justice System		The New Civil System	
The Twelve Families	M	\$55.05	(1/7)M	\$7.86
Beatrice	(1/2)M	\$27.025	(6/7)(1/2)M	\$23.67
W.R. Grace	(1/2)M	\$27.025	(6/7)(1/2)M	\$23.67
Totals	2M	\$110.1	M	\$55.05

Table 4. Comparison of Results

The system developed in this report awarded much more in damages than the U.S. system. It is difficult to gauge with any accuracy the dollar amount that represents the defendants' harm, so it is not possible to give an exact answer for which result is closest to perfect. However, other aspects illustrate the fact that the government's settlement was too small. There was sufficient evidence to show that the contamination most likely caused the harm to the defendants. However, contamination cannot be sued, one must sue the company responsible for it. No company along the river in Woburn could be proven guilty using preponderance of the evidence. Hence, the court found none of the companies liable, and no compensation was paid at first. The only compensation paid to the families by the defendants was the \$8.5 million paid by W.R. Grace in reaction to the EPA report. Our system, with its objective of minimizing injustice, allows for the plaintiff compensation without overly penalizing questionable defendants. Each defendant pays an amount in relation to its probable guilt. Under the system developed in

this report, this case would not have been ruled in the defendants' favor. The plaintiffs that were harmed would be compensated and the companies that harmed them would be fined.

For the Future

This project has devised a civil justice system by first defining the principles upon which it should function. We have concentrated on the compensatory and punitive systems, and formulated them to meet the objective of minimizing injustice. The report has focused on concepts, and has not been overly concerned with procedural details. However, during our discussions, we found certain procedural areas that could be optimized through application of our judicial principles. These areas can be investigated in full in future studies, and can be employed in conjunction with our fundamental system to produce an even more effective judicial practice. The areas we discussed are as follows:

- Court Assistance Prior to Trial: The establishment of an evidence gathering position mandated by the court.
- Attorney Malpractice: Stricter enforcement and punishment if an attorney introduces additional injustice to a case..
- Conform with Industry Today: The establishment of committees or a professional court panel to assist judges as well as juries. These professionals would help in areas unfamiliar to the court.
- Best Use for Punitive Damages: Setting up some fund for punitive damages. The punitive damages would not be paid to the defendant, but some other organization.
- Time Constraints: Ensuring an efficient resolution to all disputes.

The first phase of the trial, the discovery process, establishes all possible evidence and witnesses that will take part in the trial. In order to discover all evidence, it is up to both sides to disclose all new evidence to the other side in order to keep the process fair. There is no way of mandating that this is done. In Jonathan Harr's book, A Civil Action, all evidence was not disclosed either purposely or accidentally prior to the case. This adversely affected the outcome of the case. The proposed establishment of a party whose neutrality is absolute would make sure that all of this evidence comes out prior to trial. This avoids any possibility of altering a verdict whose outcomes is crucial to the

legitimacy of the system. A justice of the peace or some individual employed by the court would ensure that the case is definitely fit for trial. This justice of the peace would add to the first step in our compensatory system by ensuring that all evidence was present before a decision is made to whether or not the case is frivolous. This concept would also help preserve the impartiality of the court.

The lawyers involved in any particular case are supposed to act according to the regulated code of the bar Association that governs and disciplines its constituents. If they act unethically, as defined by this code, they could face being disbarred and therefore be prohibited from practicing law. The definition of 'ethical' therefore has a great impact upon the performance of a judicial system. Lawyers with questionable motives, popularly referred to as 'ambulance chasers', can skew the results of a system and incur greater injustice. Two areas that relate to malpractice are: Rule 11, which says that they may not seduce more clients into the frivolous claim, and barratry, which refers to the groundless stirring of frivolous lawsuits. These two areas, along with the definition of 'ethical', can be optimized through the use of our concepts of justice to further minimize injustice.

The next phase is the gathering of experts in the field in question. There is no current regulation for these expert witnesses. Not only is their credibility unresolved but also their knowledge in the specific subject matter on trial. The system must be allowed to prohibit such "experts" if they have been proven to fabricate evidence. Also, these experts must not be allowed to accept sizable amounts of money in exchange for their testimony. There should be a limit. A regulated means should be established by the court and backed up a panel of proven experts. In this technological age, the civil system must advance as all other industries have done already. It lacks the proper knowledge, and the system is unable to find grounds to excuse an expert for his 'false' testimony. The system should have various committees like the ones established in Congress that are familiar with all aspects of the marketplace. The overseers of the committee systems, such as the NAS, (National Academy of Sciences) and other independent agencies, should form the court panels. This will ensure that proper facts are used and frivolous suits with pseudo-expert witnesses are minimized. The overall justice will be maximized. Not only will these experts be evaluated by these committees but the judge will as well. Judges are also unfamiliar with the technology in class action suits in today's day and age. These

committees will be like advisors. Advising admissibility issues as well as evaluating expert witnesses. It is necessary for the complexity of society to be reflected by the courts.

Our system seeks to establish grounds by which the lawyers can use punitive damages as a means of ameliorating a potential hazard to more people, raise awareness in the industry, and relay a message that this cannot happen again. These guidelines should consider the severity of the crime. In this case, twelve families were directly affected by leukemia. The direct deterrence or the enormous reward paid by the defendant is not the only aspect that should be considered in the determination of punitive damage. The use of inherent deterrence, by the media and other means, will put a limit or cap on some of the rewards. In such high profile cases as the Woburn tanneries, the media was as damaging to the companies as the punitive damages awarded directly. For example, W.R. Grace stockholders suffered losses equal to one-hundred and fifty million dollars the day after the decision. An optimal system will account for the inherent as well as the direct deterrence. This system should establish limiting factors but will recognize the need to severely punish, even bankrupt, companies that are repeat offenders. The sum that Schlittamann originally sought if given to the families would not optimally deter future harm. There are organizations in place that are supposed to regulate such incidences. These organizations should, therefore, benefit from such an enormous award. For example in A Civil Action, the EPA could be given some of the award as a means of prevention. Giving punitive damages to the plaintiff would not be an optimal use of the award. A future study could determine what method would best achieve the objective of deterrence.

Lastly, the efficiency of the system would be optimized through a time constraint. For example, the Anderson case was drawn out way too long. The corporation's lawyers implemented an unethical bombardment tactic that severely hurt the plaintiff's chances of winning. Money should not be such an issue that it does not allow a regular person to take an industrial giant to court. Court time equals money, however. An optimal system would not allow this type of tactic and the budget of both the plaintiff and defendant would be known prior to trial. The judge must realize that these bombardments are a big disadvantage to the plaintiff and this does not convey equal justice. Also, the case should

have never reached trial until the EPA determined all of the questions concerning the contamination of the groundwater. In the end, the companies were proven by the EPA to have caused environmental damage to the Aberjona River and, ultimately, to the drinking water that caused leukemia. This was not proven to the jury because the case became so involved with misdiagnosis by both sides. The jurors should not have heard any of it, however, until the EPA along with agencies like it, such as the NAS presented their findings. The convolution of the case destroys the integrity of it.

Overall, these areas can be examined further and optimized through future studies. They can be used in conjunction with our system in order to achieve the objective of minimizing injustice.

Conclusion

The objective of this report has been to develop a functional definition of justice and then formulate a civil system in accordance with it. Knowing that it is not possible to have an infallible system, the concepts of justice were applied in such a way as to optimize the new system. Also, what is considered optimal had to be defined. To do this, a set of proven judicial principles, taken from history, were used in conjunction with concepts formulated in this report. The investigation of all of this information concluded that the objective of the optimal civil system is to minimize injustice. The new system was designed for this goal, but it also had to take into account the concepts and principles of justice that were found to be important. The system must be dynamic, yet at the same time consistent. It has to produce the same outcome for the same problem, but still be able to handle unique cases. Also, it must be insensitive to any economic or social status. The judge and jury must remain at all times impartial and unbiased. The rulings should always be based upon factual evidence, and never include personal beliefs.

The system we developed achieves all objectives. Injustice is minimized through the use of a compensatory and a punitive system. These two systems each encompass one part of our definition of justice. We have defined justice to function on two levels, direct and indirect. The compensatory minimizes injustice by basing all rulings strictly on factual evidence. The decisions are directly related to how much proof each side has presented. In doubtful situations, both the plaintiff and the defendant are found partially right, and the compensation is awarded accordingly. Over a long period of time, this method of partial rulings minimizes the injustice inherent to the system, and maintains an unbiased position. Furthermore, the new system is consistent and predictable, yet sensitive to differences in particular cases.

This system is another refinement in a considerable history of legal improvements. It has been designed to account for the fallibility inherent to the practice of justice. Through what has been shown, this system has minimized injustice in an effective manner.

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