The Convergence of Expectations

A Magical Game Theory Principle
Based on Client Driven Solutions: A New Mindset for Successful Family Law Negotiations and Mediation

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In Game Theory based negotiations, as defined by your authors, if you (as a lawyer) learn the required Game Theory skills and principles, you can create client driven solutions, producing a win-win for all parties. A client driven solution reflects choices made by the **parties** in a divorce case, rather than choices made at the direction of or guidance by professionals. Stay with us on this, because this principle undergirds a new mindset for successful negotiations and mediation.

Lawyers often seduce clients into the world of the lawyer, by focusing on legal outcomes that reflect the values or interests of the lawyer, rather than the client. For example, paying the lowest amount of spousal support might seem self-evident to the lawyer, but might not be the best solution, even for the payer, in a particular case. An equal division of property might seem a given, but again in a particular case, might not be a good solution for either party.

Psychologists and mediators encounter issues comparable to the lawyers. They often seduce clients into the world of social science research, rather than focusing on a family specific solution. Even good social science research is an aggregate of data with averages that might or might not apply to a specific case. Research results are helpful because they provide information about benefits and drawbacks to various solutions, but they are not a prescription for every case.

Solutions generated by professionals might be doing a disservice to their clients. The best solutions are those generated by the **parties** based on their own histories, values, interests and long-term life goals.

In our two books, ***Game Theory and the Transformation of Family Law*** and ***Winning Strategies in Divorce,[1]*** one of the principles we describe is a process called the "Convergence of Expectations." Before you go to sleep or toss this booklet, please read on. Our takeaway principle is critical for truly successful family law negotiations and mediation!

Convergence of Expectations is one of the more complex principles in Game Theory to understand, in part because the phrase has a technical meaning that is slightly different from what the words suggest. Also, making the Convergence of Expectations more complex, to understand and implement, requires the understanding and application of five other Game Theory principles, which we will discuss in the booklet:

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[1] For more on the subject, you are encouraged to read the following two books, written by your authors: "***Game Theory and the Transformation of Family Law***: Change the Rules- Change the Game. A New Bargaining Model for Attorneys and Mediators to Optimize Outcomes for Divorcing Parties." Unhooked Books. Scottsdale, AZ 2015 and "***Winning Strategies in Divorce***: The Art and Science of Using Game Theory Principles and Skills in Negotiation and Mediation." The latter is an online book only. See www.unhookedmedia.com.

[2] **Bayes Rule- Preview**: Bayes Rule means that expectations, predictions and probabilities change after receiving new information. The Convergence of Expectations starts here!

[3] **Information Management- Preview**: With good Information Management, optimal agreements have highest probability of aiding both parties in reaching their long-term life goals, when the information provided in negotiations is public, verifiable, complete **and** perfect.

[4] **Bounded Rationality- Preview:** The parties possess an extraordinary amount of information about themselves and each other, conscious and unconscious, likely unknown to the attorneys or the mediator. Very few decisions in real life are made using the Scientific Method of gathering information, looking at the pros and cons of the options available and choosing. Most decisions are made on the basis of what is called Bounded Rationality. Simply put, our brains evolved to hold enormous amounts of information, much of which is unconscious, but available to us when we make decisions, and this is exactly how most decisions are made.

[5] **Objective and Subjective Payoff Values- Preview:** A lawyer or mediator is able (through discovery) to learn the objective values in a case, and even if sophisticated, might be able to determine some of the subjective values involved. However, there is no way for a mediator or lawyer to understand all of the subjective values in play that the parties might know, consciously or unconsciously. Both the objective <u>and</u> subjective values need to considered, especially the subjective values.

[6] **Sequential Bargaining- Preview:** For the Convergence of Expectations on optimal solutions to occur, Information Management has to include both objective **and** subjective values, shared by taking turns, rather than starting with positions. The process is enhanced

Principle One: Bayes Rule

John Bayes was a monk and mathematician several hundred years ago, whose examination of the role of information on predicting probabilities changed statistics forever. In a sense, he asserted that statistics are not static predictions, as was thought at the time, but are dynamic predictions that change with new information. He showed mathematically that not only do our intuitive expectations change with new information, but also the actual probability changes.

For example, assume that we have three coins. You know that two coins are fair coins that will come up heads about one-half of the time and tails about one-half of the time. One coin is an unfair coin, weighted to come up heads most if not all of the time. You do not know which is which. We pick up a coin, flip it and it comes up heads. We ask, what is the probability that this coin is the unfair coin? If you answer one in three, you are approximately correct. We say approximately because the other two coins will come up heads if flipped once about one-half of the time, so the chances that this is the unfair coin are slightly better than one in three, but only slightly. However, assume that we have flipped the coin three times, and each time it comes up heads. Intuitively, you will strongly suspect that the coin is the "unfair" coin. What John Bayes showed mathematically is that the actual statistical probability changed. Here is the technical formula for Bayes Rule (if you care):

$$P(A/B) = \frac{P(B/A)P(A)}{P(B)} = \frac{P(B/A)P(A)}{P(B/A)P(A) + P(B/Ac)P(Ac)}$$

In a sense, you intuitively made this calculation when you began to suspect (strongly) that the coin was the unfair one. If you did this experiment eight times, and each time the coin came up heads three times in a row, using the formula above, we can calculate the probability that the coin is the unfair coin, which went from one in three (about 33%) to about seven in eight (87.5%).

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when parties are front and center and the integral part of the inquiry process. The reason for this is Bounded Rationality. The parties have information that can inform what questions to ask. Therefore, eliciting information about subjective values likely works best if the parties are in the same room with one another, either in mediation or in four-way negotiations, bargaining sequentially and not simultaneously.

On a more pragmatic level, what does this all mean? The principle involved is that you began with a belief (33%), which at that time was true, but when you received the new information, that the coin came up heads three times in a row, you changed your belief (82.5%), which was also true.

We can generalize this principle to many other situations. Simply stated, if we are mentally healthy, we have beliefs, but we change those beliefs with new information. If we resist changing our beliefs with new information, then we become increasingly distant from reality. In our coin example, if after the coin comes up heads three times, we persist in our belief that the odds were one in three (33%) on the next toss, we would be grossly incorrect. Bayes Rule not only applies to statistics, it applies to any belief. New information should have an effect, and at times, completely change our beliefs.

In a famous example, the Dalai Lama was once asked what he would do if science proved that reincarnation does not occur. With his usual smile, and without missing a beat, he said that he would have to change his belief in reincarnation. Changing our beliefs with new information is a sign of sound mental health and allows us to navigate the world around us. Rigidly clinging to a belief in the face of new information, inconsistent with our belief, leads to intractable conflict, either between us and our surrounding reality, or with other people, or both. One of the frustrating aspects to high conflict divorces is that the parties have negative beliefs about one another than do not change with new information.

Perhaps a few additional examples might help clarify this point. A simple example might be the following: Donna believes that Bob does not respect her very much, based on a few occurrences in the marriage and now during the divorce. Bob arrives late for a transition when bringing the children to her home. Donna has now had her belief supported and reinforced. She can react, either internally by getting angry or externally by openly accusing him of not respecting her schedule. Or, she can ask why he is late. Bob explains that there was an accident on the highway, which had nothing to do with disrespect. If she is unhealthy, she will cling to her belief, but the only way to do so is to consider Bob a liar, a new belief. One can see how clinging to beliefs can lead to intractable conflict. If she is healthy, she will change her belief at least this time when he was late.

Let us consider a more complex example. Bob asserts that he wants a shared physical custody schedule with their son. Donna believes that Bob is

only interested in paying the least amount of child support possible. If she is healthy, she will ask what he is trying to accomplish with his suggested schedule, or she can ask her attorney to ask, or she can listen when a mediator asks Bob this question. Bob explains that his father was not very involved with him as a child and that he suffered from that absence, resented it and also believes that he has not done as well in life as a result. He even thinks that he did not learn how to treat his wife properly as a result, and he wants their son to have a different life and a better future. He wants to be involved with their son's activities, know his son's friends, be involved with school and support Donna to teach their son to be respectful of his mother.

Donna can change her belief with this new information, and they can work on solutions that not only accomplish what she wants to accomplish but also what he wants to accomplish. Or, she can cling to her belief, decide that Bob is being disingenuous and is just interested in the money.

There is a fascinating effect regarding the Bayes Rule Principle: as two people in negotiations receive new information and their beliefs change, they begin to share a vision of a solution. This is called the **Convergence of Expectations**. In order to create a convergence of expectations on good solutions in negotiations, mediation, or both, the key is surfacing new information from the parties relevant to the issue being addressed. This is accomplished by asking questions, not by reacting, jumping to conclusions or giving directions. This is Bayes Rule: the sharing of new information that changes beliefs and sets the stage for a Convergence of Expectations.

Principle Two: Information Management

In Game Theory, information management is defined by four facets:

1. Public vs. private
2. Verifiable (reliable) vs. unverifiable (distrusted)
3. Complete vs. incomplete
4. Perfect vs. imperfect

Information is public when all of those involved, such as both parties and their attorneys, have the same information. Information is private if some of those involved have relevant information, but others do not. Information is verifiable when the information is considered reliable, either with documentary proof or by reputation, meaning that the person revealing the information is trusted by others to be revealing truthful information. If

the information provided is distrusted, it is <u>unverifiable</u>. Information is <u>complete</u> when those involved know all of the steps and choices leading up to the disclosure of the information. If the steps and choices are not known, the information is <u>incomplete</u>.

Information which is <u>perfect</u> or <u>imperfect</u> involves a subtler point that might benefit from an example. Assume that one party proposes to pay a certain amount of spousal support. The party making the proposal has been told at work to expect a large bonus for the year and a substantial raise for next year. If the party has told or tells the others involved in the negotiations this information, the information is both public and complete. All involved not only know the information but also know the steps leading up to the offer. If this information has not been revealed, the information is private and incomplete. Finally, information is <u>perfect</u> if those involved are aware of the range of choices available and the likely payoffs resulting from those potential choices. Information is <u>imperfect</u> if one or more of those involved are unaware of available choices and/or of the potential payoffs associated with those choices. In our example, the revelation of the information about the bonus and raise provide more choices and more potential payoffs to both parties. Thus, the information is perfect.

As another example, an unrepresented father agrees that although he and the mother have an equally shared placement schedule, the court documents designate her as primary caregiver. He does this because she explains that this allows her to qualify for government housing, which in turn might reduce his child support obligation. The information is imperfect because the father does not know all of the payoffs; that is, the legal implications of his agreement. When after the divorce is final, the mother proposes moving out of the area, he discovers one of those payoffs, namely his disadvantageous position in a relocation situation.

One can see that the four facets of good information management are interrelated. Optimal agreements have a better chance of being reached if information in the negotiations is public, verifiable, complete **and** perfect. An optimal agreement in Game Theory-based negotiations is defined as being as good as it can be for both parties, given the limitations of reality, and as having the highest probability of aiding both parties in reaching long-term life goals.

As a simple example, assume that a couple has extra money in the bank and decides to do something fun together. They set as their goal to

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have a second honeymoon, to renew their romantic ties to one another and to explore each of their goals for the next ten years. This is a step in making the information perfect: they are sharing goals and potential payoff values for both of them. They talk about what led up to their current desire to rekindle their interests in one another and talk about job responsibilities, financial pressures, the responsibilities of parenthood, interests not in common, and so on. They are working on making the information complete. She asks him if he has been attracted to other women, and he answers honestly "no." She could tell. The information is verifiable by reputation. He asks her why she has been so much less affectionate. She responds that she believed that he no longer found her attractive after having children. He reassures her that is not true - new information for both of them and an opportunity to change beliefs (Bayes Rule). They begin to share information about what a second honeymoon could include for each of them, making the information increasingly perfect. They gather information about the options discussed, increasing the perfection of the information (costs and options). They decide on an option, set dates and begin to take the steps. The second honeymoon might or might not meet their expectations and hopes, but they have greatly increased the chances that it will. This is an optimal solution for both of them, based largely on good information management.

This proposed new mindset flies in the face of traditional bargaining models, in which each party is attempting to accomplish the best legal outcome for themselves, independent of whether the legal outcome is good or bad for the other party and whether or not the outcome actually helps either party achieve their long-term life goals. In the traditional model, keeping information private, incomplete and imperfect can be very tempting. In our earlier example, by not revealing a bonus and raise, our party might believe that he or she can achieve a lower spousal support amount, thereby improving the legal outcome for themselves[7]. With our couple wanting to have a second honeymoon, using traditional bargaining methods, each spouse would think of a honeymoon that he and she wants and propose it. Unless they both wanted exactly the same thing, they would be in a dispute. See the difference!

In purely competitive games, like poker, where one person wins while others lose, that is the goal and the very definition of this game. Therefore, keeping information private, incomplete, and to the degree possible, imperfect, enhances the chances of winning.

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[7] Of course, we are ignoring the legal and ethical issues and the requirement of full financial disclosure when making our point.

In chess, however, the information is public (both players see the board), verifiable (the moved piece), complete (both players have seen all of the prior moves) and perfect (each player knows all of the choices available to both players and the payoffs for those moves, that is, the gains and risks)- the very definition of this game. Many people study famous chess games, where one of the players prevailed with brilliant strategy and tactics. Far more interesting are the perfect games in which both players made all of the right moves, and the game ended in a draw, the optimal outcome for both players, rather than having a winner and a loser.

Rafa Nadal and Roger Federer enjoy the honor of having played what is generally considered the best tennis match in history: the 2008 Wimbledon Final. This was not because one player dominated the other, but because both played incredibly well, where who won came down to the final stroke of the ball after 10 hours. If asked before the match what would be the most selfish outcome, they each might have said, "to win the three sets, 6 Love and go home in two hours." Instead, after that tournament, which lasted ten hours, we doubt either would have traded that experience for any other match, although Federer might have said he wished he had hit that very last ball!

It might seem counter-intuitive that each party can do better if the focus is on both parties doing as well as possible, but Game Theorists have shown that to be the case in extensive research studies. Perhaps the most well-known Game Theorist is John Nash, because of the book and movie *A Beautiful Mind.* John Nash is credited for proving mathematically that an optimal outcome for any individual is enhanced by first attempting to optimize the outcome for all involved.

More pertinent to the purpose of this booklet, based on the science undergirding Game Theory, by managing information to be public, verifiable, complete and perfect, a mediator or two lawyers can facilitate the **Convergence of Expectations** leading to an optimal outcome.[8] Rather than a "win" in negotiations or litigation, the aim of Game Theory bargaining is to reach an optimal outcome for both parties. Good Information Management helps to accomplish this goal. Mediators and lawyers facilitate this process both by eliciting information from the parties and by making that information public. This includes providing information to the parties, particularly about the range of choices available under the law and about the

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[8] This is the very skill we are urging our readers to learn and use in negotiations.

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implications and elements of the payoffs that the parties, unfamiliar with the legal process, might not know.

In traditional bargaining, for example, assume Kathy is the high earner in a case, who asserts to her attorney that she does not want to pay spousal support. Her attorney speaks to her about the probability of spousal support if litigated, including other alternatives, such as an unequal division of property in lieu of spousal support. She agrees to an unequal division, and this is proposed to the other party. Whether or not this is in Kathy's best long-term interests is unknown because of poor (basically no) Information Management. First, there is a great deal of private information (not yet known), even private from the Kathy's attorney. Second, the information is incomplete, and perhaps most concerning, the information is imperfect. A decision is being made without a clear understanding of how that decision will impact Kathy's and her spouse's long-term financial goals. We do not know if Kathy's reasons are emotional, part of a life-style change, related to a new romantic interest or part of a sound financial plan. We have little information about her spouse's financial goals and interests, or what led up to Kathy's position. The information being shared with the other party is solely that Kathy does not want to pay spousal support. This last factor could lead to the development of incorrect beliefs, rather than correcting incorrect beliefs.

A **Convergence of Expectations** on an optimal solution is impossible in this example, absent the proper Information Management process. Applying our Game Theory principles, Kathy's attorney would proceed in a different direction and would obtain more information from Kathy about what led up to a wish not to pay support, what her long-term financial plans are, and learn any other factors related to the issue of spousal support. That information could be shared with the other party and his attorney, prior to taking a position. Questions would be asked about the other party's financial goals and other life plans. This is what we mean by having good Information Management. In the end, an unequal property division might or might not be the best solution for both parties. Other solutions might be more likely to help both parties reach long-term financial and life goals.

Principle Three: Bounded Rationality

Most people are familiar with the Scientific Approach to decision-making, where information is gathered, options are listed, the pros and cons of each of the options are developed, and the choice is made for the option with the most pros and the least cons. However, very few decisions are actually made this way in real life. Most decisions are made on the basis of what is called Bounded Rationality. Simply put, our brains evolved to hold enormous amounts of information, much of which is unconscious but available to us when we make decisions.

A famous experiment to demonstrate this phenomenon is the Stranger-meeting Experiment. You are placed in a room with the researcher and told the following: On a certain date in the future, you are to meet a stranger in New York. You can have no contact with the stranger in advance and only know that you will both be wearing red baseball caps at the time. You have 30 seconds to choose a place and time of day to attempt to meet. READER: Take 30 seconds now and make this decision.

If you are like most people, out of all of the possible times of the day and places to meet, you chose Noon and one of three places – the top of the Empire State Building, Grand Central Station (usually under the big clock) or Times Square. In real experiments, the strangers would meet about 60% of the time. How is this possible? If you did choose Noon and one of these three places, you might ask why? You might say any number of things, but the amount of information that went into your choices might be enormous, and you might only have conscious access to some of it. If we surveyed subjects and asked who their favorite historical actor was, and we added to our instructions to you that you and the stranger both listed Cary Grant, you would likely meet 100% of the time, because of a movie with Cary Grant, in which he was to meet his love at the top of the Empire State Building. You might or might not actually remember the movie, but would still likely choose the Empire State Building.

In an intact marriage, with children, parents do not sit down and talk about who will do the majority of the homework help, who will take the children to the doctor, who will make the final decision about whether or not the children can have tattoos, and so on. They do not consider all of the options for every choice, list the pros and cons and make their choices as to how to live their lives together. With Bounded Rationality, they drift organically into roles. One ends up doing most of the homework with the

kids out of interest and/or ability. The other might do the majority of the cooking. They might share cleaning, while the husband always cleans the kitchen, the wife always cleans the bathrooms, and so on. These choices are made based on the enormous amount of conscious and unconscious information each of the spouses have and the process of bounded rationality.

In amicable divorces, we often see the same thing. They might know that they have a challenging child who might not take transitions very well, where one of the parents is much more patient and effective. They make decisions because they have stored information about themselves, the other parent and the children, and almost automatically pick a path the best suits their individual situation. A psychologist might believe that children do best if in a shared physical custody schedule, which is supported by a good deal of research, but the parents in a particular family might know, consciously or not, that will not work well for their children.

This is Bounded Rationality at work. Why is this important to our purpose in this booklet? When a mediator or two lawyers are working with parties, the mediator and attorneys do not have access to the enormous amount of information that the parties have in their minds. They cannot know, therefore, the outcomes that are optimal for the parties. Mediators and lawyers might have opinions about the best legal outcome for the parties, but legal outcomes are outcomes for the attorneys or mediator, not the parties. For the parties, legal outcomes are only tools for reaching life goals. Reaching life goals are the outcomes for the parties.

Reaching an optimum agreement consistent with the parties' life goals should be the outcome for the parties, but only they can really know what outcomes would be optimal for them. When lawyers and mediators, or even legislation, attempts to define optimal outcomes for parties, they interfere with the Bounded Rationality of the parties and impose on them legal outcomes that might or might not help them reach important life goals. When a lawyer tells a client, who is a father, that the best way to minimize the amount of child support and possibly spousal support is to insist on an equal 50/50 physical custody schedule, the lawyer has invited the client into the world of the lawyer, focusing him on legal outcomes rather than life goals. The lawyer might also have interfered with the Bounded Rationality of the client, and perhaps the other party too, reducing the chances of an optimal outcome for either party.

What if both parties understand that the mother is highly devoted and well-respected as a parent by the father? What if both parties understand that the father is highly interested in pursuing his interest in hunting, that includes hunting trips around the continent, with a hunting group that he has been a part of for years, to which he has had the freedom to go independent of the children, because the mother has always been willing to take care of the children? What if both understand that the father has a more distant interest in being involved with the children's lives? When the attorney strongly suggests a 50/50 schedule, is the father likely to tell his attorney that he would rather give her the money? Probably not.

Letting the Bounded Rationality work in mediation or negotiations might have led to a **Convergence of Expectations** on a schedule that has the children with the mother most of the time, with a good deal of flexibility for the father to be involved.

The practical implication of this is for mediators and lawyers to give both parties the opportunity to let Bounded Rationality produce the best options for those particular parties. This includes not imposing the opinion of the mediator or lawyers with regard to legal outcomes or even focusing parties too much on these legal options, especially early in the process. This does not mean limiting information. If a party raises an option, the lawyers have an obligation to educate the party about the implications of that option. This fulfills the responsibility to make information perfect. However, it does mean that the lawyer should not steer a client away from an option, simply because the lawyer opines that the option is a less than optimal legal outcome.

In our prior example with Kathy and her spouse, Kathy might believe her spouse when he announces a plan to seek further education to enhance his career and earning capacity because she knows that he has the ability to do this. He might understand that Kathy would like to be free of legal financial obligations to him as soon as possible. They might have a **Convergence of Expectations** on a high spousal support award for a short duration. This might better meet the life goals of both spouses compared to no support and an unequal property division. Kathy and her spouse have a good deal of information about themselves and each other, conscious and unconscious, that the attorneys or mediator do not have.

This leads us perfectly to the next Game Theory principle: Objective and Subjective Payoff Values.

Principle Four: Objective and Subjective Payoff Values

Assume that you are in an experiment. You are sitting at a table with another individual that you do not know. We place 100 $1 bills on the table and tell one person to propose a split of the $100. If the other person accepts, you split the $100 according to the offer. If the offer is rejected, neither person gets any money. The proposal is a $95- $5 split. What do you do?

If you are like most people, you would reject the offer, and neither of you gets any money. However, it appears both people behaved irrationally. To be perfectly rational, the offer should have been $99 to $1, and you would have accepted the $1. The one person is maximizing personal benefit, and for you, $1 is better than nothing. In our example, the offer for you was $5, but again most people in real experiments reject that offer. But, were you being irrational? Taking $5 would seem more rational than taking $0.

The answer to these questions lies in understanding the role of "subjective payoff values." Everything has both an objective value and a subjective value. The $5 has the objective value of $5, but also has several subjective values. If you are homeless and have not eaten all day, that $5 might have a great deal of value. If you are wealthy (or even financially comfortable), the $5 has very little or no value. More important, the split offered also has the subjective value of being unfair. You might be willing to give up the $5 to punish the other person for being unfair- all completely subjective.

Assume that in a divorce, a painting was given to the wife by the husband's father, who is a fairly well known painter, whose paintings draw a fairly high price, but not particularly high for either the wife or husband, who jointly have a fairly substantial estate. The objective value is high enough to be included in the property division. However, the parties end up in a substantial dispute over who will get the painting. Whoever does not get the painting will receive the objective value in other property, equalizing the objective value. So, what is the dispute about? The subjective value of the painting to each of them is the issue. One might infer several subjective values at play in this dispute for each spouse, but the point is that the dispute is about the subjective value, not the objective value.

The same is true in disputes over children. The children might have some objective value, such as child support or who will receive the family residence, but there are also many subjective values usually at play for both

parents. Many parents almost seem desperate to prevail in their bids for power (legal custody) and time with the children (physical custody/physical placement/parenting time). The desperation is the result of the subjective values involved. Even child support and who gets the family residence generally have more to do with subjective values than the objective value. The house is being "sold" to one of the parties, so the other person usually gets financially compensated in the property division. It is just a house being sold at market value. However, there might be a number of subjective values involved: proximity to neighborhood friends, the comfort of not having to look for another residence or meet new neighbors, an implied advantage with the children, and so on.

Child support in most jurisdictions is simply how things are paid for. If a party gets a low child support order because the parenting schedule is 50/50, that party spends the money on the children directly. If a high child support order is in place because the other parent has the children most of the time, the money is given to the other parent, and that parent still spends it (or at least some or most of it) on the children. It may be the same amount of money (or close to it), but the subjective value of being in control of the spending can be very important to parties (and sometimes is <u>the</u> critical issue).

A lawyer or mediator might be able, through discovery, to learn the objective values in a case, and even if sophisticated, might be able to determine some of the subjective values involved. However, there is no way for a mediator or lawyer to understand all of the subjective values in play that the parties might know, consciously or unconsciously. Assume that a lawyer is representing a father who asserts that he wants to be equally involved with the children. The objective value might be to achieve a 50/50 physical custody schedule. The wife fights that, and they begin the lengthy period of litigation.

What if both of the parties understand, at least unconsciously, that it is psychologically critical to the mother to have the children sleeping at her home at least most nights, and the father is indifferent to where the children sleep, but is most interested in being involved in after school activities? In a sense, different times of day with the children have different subjective values to the parties. An optimal agreement, therefore, might have the children sleeping at the mother's home most nights, with the father having a great deal of after-school time with the children. However, this can only be achieved if the subjective values in play are included in the **Information**

Management, where the **Convergence of Expectations** is allowed to proceed.[9]

Assume in a different divorce, both parties want the family cabin on a lake. The objective value can be determined easily, but what about the subjective values involved? Careful inquiry reveals that it was the wife's father who built the cabin, and the sentimental value to the wife is high. She might also envision annual trips to the cabin with the children and having the cabin available to the children when they are adults. Remember, she knows it was her father who built it, and this subjective values holds sway with her. Careful inquiry with the husband not only reveals that he not only envisions trips with the children, but also loves fishing and enjoys annual trips to the cabin with his fishing friends. He too wants to continue to have those traditions. He even wants his oldest daughter to join him on those fishing trips, as the children of his friends join the group. By revealing this information in the negotiations, many optimal solutions can begin to be discussed. If decided on the legal issue alone, the arguments center around who has what rights, likely to be decided by a judge, whose own subjective values may become more involved than any legal standards.

The point is that for a **Convergence of Expectations** on optimal solutions to occur, Information Management has to include both objective **and** subjective payoff values. This can only occur through skillful inquiry. The process is enhanced when the parties are front and center and the integral part of the inquiry process. The reason for this is Bounded Rationality. The parties have information that can inform what questions to ask. In our Cabin Example, the husband might ask, "Is it because your dad built it," which the wife might not even have been consciously aware of prior to the question. Lawyers and mediators might never have thought of the question. Therefore, eliciting information about subjective payoff values generally works best if the parties are in the same room with one another, either in mediation or in four-way negotiations.[10] [11]

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[9] By now, the reader should see the various Game Theory principles at play, all leading the parties toward a client driven solution and an optimal settlement.

[10] This is a really important point. The Convergence of Expectations likely works best when the parties can hear and see each other, read body language, and the like, which is the very point discussed in this booklet. Lawyers and mediators might even consider a working presumption in all cases: that most if not all negotiations should occur when everyone is in the same room (either in mediation or in four-way negotiations), unless there is a compelling reason to separate the parties and counsel.

[11] Note how three of the five principles discussed in this booklet all come together in this one paragraph Information Management, Bounded Rationality and subjective payoff values.

Principle Five: Sequential Bargaining

Game Theorists distinguish between games with Simultaneous Bargaining and those with Sequential Bargaining. In a Simultaneous Bargaining Game, the players (i.e., the parties) make a choice not knowing the choice of the other player. In a Sequential Bargaining Game, the players take turns making choices and thus have important information when making the next choice. In the latter game, all this is enhanced when each choice includes information about the objective and subjective payoff values in play (something which can and should be encouraged and facilitated by the lawyers).

Simultaneous Bargaining almost always leads to less than optimal outcomes, and far too often, leads to conflict and significantly sub-optimal solutions. In our two books, we describe at length not only why this _tends_ to be the case, but also why this _must_ be the case. And yet, traditional bargaining models are almost always set up as a simultaneous bargaining process. For example, Lawyer A talks with her client and develops positions on the key issues in the divorce, and Lawyer B predictably talks with his client and develops their positions. Unless by some miracle their positions are identical in the simultaneous bargaining process, a dispute over which to compete, with inevitably sub-optimal solutions, will be the end game.

Again, in our "second honeymoon" example earlier in this booklet, imagine that the spouses go to attorneys, and each tells their attorney that they want to have a really romantic honeymoon. Lawyer A asks what the client thinks would be a good choice, based on what the client wants, develops a proposal and makes the proposal to Lawyer B ("the other side"). Meanwhile, the other spouse has done the same and already has a position on the ideal second honeymoon. The chances that they each came up with the same idea are minimal. Now they have a dispute, instead of a plan.

Picture the childhood game, "rock-paper-scissors," in which two people count to three and then reveal with their hands a rock, a piece of paper or a scissors. If one is the rock and the other is paper, the paper can wrap a rock and bops the rock on the hand. If they reveal a scissors and paper, the scissors bops the paper, and of course, the rock bops the scissors. There are nine possible combinations. In three of the games, the end result is the same, and no one gets bopped. However, there are six combinations where the end result is different, and someone gets bopped. Sub-optimal again!

In the Prisoners' Dilemma, a well-known example used in Game Theory, the principle displayed is that the only rational thing to do is to make choices that actually turn out worse for the two prisoners than they could have achieved.[12]

Sequential Bargaining solves this problem, particularly when the other four principles[13] are incorporated into the process. By taking turns with offers and questions,

- ✓ with good <u>information management</u> that includes <u>objective and subjective values</u>,
- ✓ with the parties driving the process using their <u>Bounded Rationality</u>,
- ✓ with the professionals facilitating but being careful not to interfere, and
- ✓ with the professionals allowing <u>Bayes Rule</u> to change the beliefs of everyone involved…. a **Convergence of Expectations** on optimal solutions occurs.

This is where it all comes together!

Summary: The Convergence of Expectations

<u>A Child-related Example</u>: Party A addresses the holiday schedule, proposing that she would not only like to have good holidays with the children, but also would like both parents to have some holiday time with the children. She wants the children someday to look back at their childhood and remember family holidays fondly. However, because her relatives are a distance away and his are closer, she would also like options for having holidays when she can travel to be with her family and the children. Notice that she is not taking a position on any issue, but simply making information available, both objective and subjective, public and complete. She is also implying perfect information, in that she is addressing long term payoff values for holidays.

Party B responds that he shares her goal of having good holidays with the children, with both sharing some holiday time. He notes that the only holidays that have sufficient time off school for travel are potentially Thanksgiving and Christmas. He is also open to the children missing some school Thanksgiving week. Again, we have good information management.

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[12] In our two books, we give a detailed exposition of the Prisoners' Dilemma.
[13] A quick refresher: Bayes Rule, Information Management, Bounded Rationality and Objective and Subjective Values.

Neither party is taking a position. She agrees that the block of time at the Winter break from school is a good time to travel and also thanks him for considering the children being off school Thanksgiving week. He adds that this would include speaking with teachers and would also depend on how the children are doing in school, with more information being made public and perfect.

One can see how information became increasingly complete, including the revelation of subjective information. To make the information increasingly perfect, the lawyers or mediator can now begin to list some options, taking into consideration what the parties have revealed to each other. The attorneys might also share how this issue was handled in prior cases, helping the parties add options that they had not considered. In addition, they might discuss automatic make-up time for the husband. As the options and payoff values are discussed, there is likely to be a **Convergence of Expectations** on an optimal solution that accomplishes the long-term goals of the parties. Notice how the settlement is based on client driven solutions!

<u>A Financial Example:</u> We can return to our Cabin Example. Following the same process discussed above, the spouses might end up with a Real Estate Partnership and an agreement to will the cabin to the children when both parents die. The professionals can help structure the agreement, with clear procedures regarding who can use the cabin, and when, in order to avoid future conflicts.

The point of having a **Convergence of Expectations** on optimal solutions is for the solution to be as good as it can be for both parties, not just one of them. Negotiations, from this perspective, become a cooperative planning process rather than a competitive dispute resolution process. This allows people to arrive at very creative solutions not available through litigation.

Professionals must have the skill set to facilitate this client driven process,[14] especially preventing the parties from playing a Simultaneous Choice Game.   What follows are a few examples demonstrating the need for special skills based on Game Theory principles.

Assume a mother meets with her attorney the first time and states,

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[14] We hope this booklet facilitates the learning process for lawyers committed to learn a new and better way of negotiating the optimal settlement, based on client driven solutions.

*"I don't care about money, and he does, but I simply
must have full custody of the children."*

She is implying to her attorney that she has a position that she wants the attorney to pursue, but obviously, she is starting by "playing" a Simultaneous Choice Game, with inferences about subjective values (i.e., he cares more about the money than the children) and making assertions about short-term goals, not long-term life goals. She is focusing on retaining full custody of the children, possibly at the price of making foolish financial decisions and possibly even foolish decisions about what will work well for her and the children.
What can/should the attorney say and do?

The required attorney skill is always to begin with an empathic statement. Otherwise the person will not feel heard and understood. For example, in this case, it might be wise to say something like,

*"I can see how important the children are to you.
I will keep that in mind as we go."*

However, the attorney should redirect the client to Sequential Bargaining, where the process starts by the attorney saying something like,

*"Before we discuss outcomes, we have to go through a
process
called discovery. This is largely getting and sharing
information, so both
of you can make informed decisions that really fit your
circumstances
and help both of you reach long-term goals. It sounds like
issues
involving the children are most important to you. Shall we
start there?"*

Professionals will need the identical skill set to facilitate this process when finances are involved, again by preventing the parties from playing a Simultaneous Choice Game. Assume a husband meets with his attorney the first time, who begins with an empathic statement,

*"I care about the children, but I will tell you this: I will
never
pay spousal support to my soon to be ex-wife. I
simply must have
a full maintenance/alimony waiver. Period!"*

Again, the attorney (repeating almost the identical words used above regarding placement), should redirect the client to Sequential Bargaining, where the process starts by the attorney saying something like,

"Before we discuss outcomes, we have to go through a process
called discovery. This is largely getting and sharing information, so both
of you can make informed decisions that really fit your circumstances
and help both of you reach long-term goals. It sounds like issues
involving finances are most important to you. Shall we start there?
Tell me how you envision your financial life in 5 or 10 years."

Our Bottom Line: In our two books, we discuss other principles and skills derived from Game Theory that help shape the negotiation process. However, here our chief focus in this booklet is on one principle, including the skills involved in achieving **a Convergence of Expectations** in the negotiation process. Most important, we hope that we have clearly identified why it is so important for the information and solutions to be generated by the parties and not by the professionals involved. With training, experience and exposure to journals and literature, it is natural for professionals to jump to the conclusion that we "know" what is best for our clients. We might have concluded, for example, that the best outcomes for children occur when both parents get substantial parenting time with the children. While social science supports this conclusion in the aggregate, it might not be the best solution in a particular case. In addition, we might have concluded, for example, that the best outcome for the wife payer is for her to secure a maintenance waiver at all costs. While this might be the prevailing view in the legal community, it might not be the best solution in a particular case, that is, it might not be the optimal plan to meet their long term goals.

When a client asks what is best for children, it might be tempting to interfere with the process. However, it is best to remain neutral, but informative. It can be useful to provide the information from social science, while at the same time noting that there are advantages and disadvantages to all parenting schedules, and what will be best for the children in this family is yet to be seen. It can also be useful to provide information based on legal precedent and practice, while at the same time noting there are advantages and disadvantages to other alternatives other than paying a steep price for a maintenance waiver.

If our goal is to help spouses reach optimal agreements, lawyers and mental health professionals need to stay humble and help clients discover what it best for them, as they experience a **Convergence of Expectations**, ultimately reaching the optimal solution(s) for each of them.

The Magic: The "convergence of expectations magic" happens when the five Game Theory Principles are incorporated into a process of Sequential Bargaining:

- when Bayes Rule is in play,
- when there is effective Information Management, where at each step in the process, information is made public, verifiable, complete, and perfect,
- when Bounded Rationality is in play and
- when each of the parties' Objective and Subjective Payoff Values are considered.

The "magic" occurs when the solutions are driven by the parties, not the professionals, a judge or even the law, and the solutions help both parties avoid getting stuck on short-term legal outcomes and focus on plans to reach long-term life goals.