BUNDLES OF HOPE: PUTTING ASPIRATIONS IN ORDER

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The primary purpose of this paper is to discuss cardinal utility theories of how aspiration affects negotiation and to propose an alternative ordinal utility theory of how aspiration affects negotiation. In the cardinal utility theories, used by some legal scholars, aspiration in negotiation is a utility maximizing point after which negotiators become increasingly loss averse. While in the ordinal utility theory this paper proposes, aspiration in negotiation is a goal that maximizes utility subject to constraints and subjective preferences.
INTRODUCTION

Many legal scholars in the field of negotiation have concluded that negotiators with higher aspiration levels\(^1\) achieve better results in negotiations.\(^2\) Some even suggest that aspiration is the most influential factor on negotiation outcomes.\(^3\) Empirical support for the significance of aspiration exists in experiments conducted in a variety of fields.\(^4\) Also, many theories can be found in the literature of law,\(^5\) business/economics,\(^6\) and psychology.\(^7\)

The value of much of the empirical research and theories supporting positive effects of higher aspiration levels is questionable. Negative treatment of the literature about aspiration can be found in questions about the design of empirical analyses;\(^8\) questions about the redundancy of aspiration as a measure in negotiations;\(^9\) and questions about the theoretical foundation of some literature discussing aspiration.\(^10\)

A few legal scholars have used cardinal utility theories to explain the role of aspiration in negotiations.\(^11\) However, in legal scholarship there has been little or no development of an ordinal utility theory to explain the role of aspiration in negotiations. In a cardinal utility theory there are set measurements of aspirations in terms of utility that can be ranked.\(^12\) While in an

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1 The terms aspiration levels and aspiration(s) are used interchangeably throughout this paper.
3 See e.g. SHELL, supra note 2, at 27-28.
4 See e.g. SIDNEY SIEGEL & LAWRENCE E. FOURAKER, BARGAINING AND GROUP DECISION MAKING 64 (1960); Sally Blount White & Margaret A. Neale, The Role of Negotiator Aspirations and Settlement Expectancies in Bargaining Outcomes, 57 Organizational Behav. & Hum. Decision Processes 303, 304-05 (1994).
5 See e.g. Schneider, supra note 2.
6 See e.g. SIEGEL & FOURAKER, supra note 4.
8 See e.g. Russell Korobkin, Article: Aspirations and Settlement, 88 Cornell L. Rev. 1, 22-23 (2002).
10 Id. at 1665.
11 See e.g. Brown, supra note 9; Korobkin, supra note 8.
ordinal utility theory the values of different aspirations can be ranked but are not numerically measurable.\textsuperscript{13}

Siegel argues that a cardinal utility measure is more appropriate for aspiration levels than an ordinal utility measure because identifying aspiration levels requires some knowledge of distance on a sliding scale.\textsuperscript{14} However, many economists think ordinal utility theories tend to be better because cardinal utility measures are often empirically nonoperational.\textsuperscript{15} After all, it is unlikely that real people think of utility in the form of a numerical value.

The primary goal of this paper is to discuss cardinal utility theories of how aspiration affects negotiation and to propose an alternative ordinal utility theory of how aspiration affects negotiation. Hopefully doing so will add to the theoretical foundation of the literature discussing aspiration. The next section will introduce the concept of aspiration, and will briefly discuss empirical evidence supporting the positive role high aspiration levels play in negotiation.

I. ASPIRATIONS AND NEGOTIATION

James Allen once said “you will become as small as your controlling desire; [and] as great as your dominant aspiration.”\textsuperscript{16} What is this ‘aspiration thing’ that attracts the attention of great men and great women? The Merriam Webster dictionary says it is “a strong desire to achieve something high or great.”\textsuperscript{17}

In the world of negotiation, the term aspiration has taken various operational definitions that can differ from the dictionary definition. Schneider says aspiration is “the specific goals in a

\textsuperscript{13} Id. at 669-72.
\textsuperscript{14} Sidney Siegel, \textit{Level of Aspiration and Decision Making}, 64 Psychological Review 253, 258 (1957)
\textsuperscript{17} Merriam-Webster’s Online Dictionary, http://www.merriam-webster.com/dictionary/ASPIRATION.
negotiation that a negotiator wishes to achieve as part of an agreement." Siegel and Fouraker say aspiration is “a position on the individual’s utility function.” Korobkin says an aspiration is “a party’s ideal goal.” This paper defines aspiration as a goal that maximizes utility subject to constraints and subjective preferences.

Traditionally research on negotiation focused on reservation point, rather than aspiration, as a predictor of outcome. Reservation point reflects the lowest acceptable agreement for sellers or plaintiffs and reflects the highest acceptable agreement for buyers or defendants. Where a bargaining zone exists, under purely distributive conditions it was expected that settlement would occur in the middle of the reservation points, but that prediction failed to be reliable in real negotiations. The study of aspiration levels provides an explanation for the deviations from the predicted outcomes in real negotiations.

Legal scholars refer to the study by Siegel and Fouraker, conducted in 1960, as a classic negotiation study about aspirations. In the study, the ‘low aspiration’ group of negotiators was given a goal of seeking $2.10 profit in a buy-sell negotiation and the ‘high aspiration’ group was given the goal of seeking $6.10 in profit. Both groups were told that they could keep any profits made and that they could not make any agreements that resulted in a loss. This implied that the groups had a reservation point of $0.00. The groups were also told that they could qualify for a second round, where they could double their profits, provided they satisfied or

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18 Schneider, supra note 2, at 675.
19 SIEGEL & FOURAKER, supra note 4, at 61-62.
20 Korobkin, supra note 8, at 22 n.100.
21 See infra Part II.B.
22 See White & Neale, supra note 4, at 303.
23 See White & Neale, supra note 4, at 303; Korobkin, supra note 8, at 3.
24 See White & Neale, supra note 4, at 303; Also, see generally ROBERT G. BONE, THE ECONOMICS OF CIVIL PROCEDURE (2003) (discussing the puzzle of settlement in Chapter Two). A bargaining zone exists where there is an overlap between reservation points of parties in a negotiation. See White & Neale, supra note 4, at 303.
25 SHELL, supra note 2, at 31; Schneider, supra note 2, at 676.
26 SIEGEL & FOURAKER, supra note 4, at 62-67.
27 Id.
28 SIEGEL & FOURAKER, supra note 4, at 62-67; Korobkin, supra note 8, 23.
exceeded their bargaining goals. At the conclusion of the experiment, the ‘high aspiration’ group of negotiators achieved a mean profit of $6.25, and outperformed the ‘low aspiration’ group who achieved a mean profit of $3.35.

A more recent study on aspirations was conducted by White and Neale in 1994. The study took the form of a house sale in which buyers and sellers received both reservation prices and aspirational goals for the house price. The ‘low aspiration’ buyers were assigned an aspiration of buying a home for $200,000, and the ‘high aspiration’ buyers were assigned an aspiration of buying a home for $220,000. The former group was assigned an aspiration of selling a home for $240,000, and the latter group was assigned an aspiration of selling a home for $260,000. At the conclusion of the experiment, buyers and sellers with high aspirations outperformed those with low aspirations.

A study on the influence of aspirations on settlement in law was conducted by Korobkin in 2002. Participants were divided into lawyers representing plaintiffs and into lawyers representing defendants. Both sets of lawyers were given reservation prices and aspiration prices. The lawyers representing plaintiffs were given aspirations that were higher than their reservation price, and the lawyers representing defendants were given aspirations that were lower than their reservation price. The results of Korobkin’s experiment again suggest that

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29 SIEGEL & FOURAKER, supra note 4, at 62-67.  
30 Id. at 67.  
31 White & Neale, supra note 4.  
32 Id. at 309-10.  
33 Id.  
34 Id.  
35 Id.  
36 See generally Korobkin, supra note 8, at 36-60.  
37 Id. at 37.  
38 Id.  
39 Id.
negotiators with high aspirations achieve better negotiation results than those with low aspirations.\textsuperscript{40}

The results of these studies and many others suggest that aspiration levels have an important impact on negotiation outcomes. However, the literature discussing aspirations in negotiation has received some negative treatment, examples of which are discussed in the next section.

I. \textbf{Negative Treatment of Studies about Aspiration}

A. \textit{Questions about The Design of Empirical Analysis}

The design of some of the research conducted on aspiration could be better. For example, the Siegel and Fouraker experiment discussed in the previous section has been questioned because the participants were told that they had a chance to get additional profit in a subsequent negotiation subject to the condition of achieving their aspiration goal.\textsuperscript{41} The instruction created a discontinuous profit motive because it provided for a spike in the value of agreements at the aspiration level relative to the value of agreements below the aspiration level.\textsuperscript{42} As a result, the experiment fails to capture the effect of aspirations when discontinuous profit motives are not present.\textsuperscript{43}

Also, the design of Siegel and Fouraker’s experiment paired negotiators from the ‘high aspiration group’ only with negotiators from the ‘low aspiration group’.\textsuperscript{44} As a result, the experiment does not capture what might happen if both negotiators paired together had high aspiration levels or both had low aspiration levels.

\begin{footnotesize}
\begin{enumerate}
\item \textit{Id.} at 52.
\item SIEGEL & FOURAKER, supra note 4, at 62-67.
\item Korobkin, supra note 8, at 22-23.
\item \textit{Id.}
\end{enumerate}
\end{footnotesize}
B. Aspirations a Redundant Measure?

Brown refers to many of the studies on aspirations as providing ‘hopeless’ theories of negotiation.\(^{45}\) Some studies of aspiration in negotiation are indeed ‘hopeless’ because they are redundant. Redundant studies on aspiration capture data already measured in negotiation theories that do not include aspiration.\(^{46}\)

Sometimes the effects on negotiations attributed to aspirations are derived from other reference points such as best alternative to negotiation (BATNA), initial offer, reservation offer, and market value.\(^{47}\) For example, if a study sets the lowest aspiration level equal to a negotiator’s reservation point and the highest aspiration level equal to the reservation point of the opposing negotiator, then its results will be derived from the reservation points even if it speaks to aspiration.\(^{48}\) Under such circumstances, is there a need to develop a theory on aspiration if the impact can be measured through the reservation points?

Another example of a situation in which evaluating aspiration levels is arguably redundant is in the context of offers.\(^{49}\) A discussion focused solely on how offers affect negotiation outcomes may be more beneficial than going through an arguably unnecessary analytical step of relating offers to aspiration levels.\(^{50}\) Such an analytical step would be unnecessary unless it holds that adjusting aspirations is a prerequisite for a negotiator to adjust the amount of his or her offer.\(^{51}\)

\(^{45}\) Brown, supra note 9, at 1165.
\(^{46}\) Id.
\(^{47}\) See Poucke & Buelens, supra note 7, at 67.
\(^{48}\) Brown, supra note 9, at 1668.
\(^{49}\) Korobkin, supra note 8, at 27.
\(^{50}\) Id.
\(^{51}\) Id.
C. **Theoretical Foundation on Strike**

Brown also calls a lot of theories on aspirations in negotiation ‘hopeless’ because they lack proper theoretical foundation.\(^{52}\) For example, Shell argues that aspiration levels can affect bargaining outcomes because a negotiator’s aspiration affects behavior that may signal the negotiator’s reservation price to an opponent.\(^{53}\) Shell’s theory, while interesting, fails to provide an account of why aspiration would make the behavior of a negotiator more transparent to an opponent.\(^{54}\)

II. **How Does Aspiration Affect Negotiation?**

The results of many studies suggest that aspirations have an important impact on negotiation outcomes.\(^{55}\) However, merely observing the influence of aspirations on negotiation outcomes does not explain the ways in which aspirations affect the judgment or behavior of negotiators.

A. **Cardinal Utility Theories of Aspiration**

Siegel and Fouraker provide a cardinal utility theory of aspiration levels in negotiation. In the model, an individual’s aspiration level is the goal with the largest difference in utility between it and the next lower goal.\(^{56}\)

Siegel explains the theory through a hypothetical example of a student aspiring to get a B-grade in an exam.\(^{57}\) Before the exam, the student has to choose between two alternatives.\(^{58}\) In the first alternative, the student gets an A-grade if event ‘E’ occurs and the student gets a C-grade

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\(^{52}\) Brown, *supra* note 9, at 1665.

\(^{53}\) Shell, *supra* note 2, at 32-33.

\(^{54}\) Id.

\(^{55}\) See Siegel & Fouraker, *supra* note 4, at 70; White & Neale, *supra* note 4, at 312; Korobkin, *supra* note 8, at 36-60.

\(^{56}\) Siegel & Fouraker, *supra* note 4, at 62.

\(^{57}\) Sidney Siegel, *supra* note 14, at 256-57.

\(^{58}\) Id.
if event ‘E’ does not occur.\textsuperscript{59} In the second alternative, the student gets a B-grade if event ‘E’ occurs and the student also gets a B-grade if event ‘E’ does not occur.\textsuperscript{60} According to Siegel, if the student believes there is a 50\% chance that event ‘E’ will occur, then the student will choose the second alternative because his aspiration is to achieve a B-grade.\textsuperscript{61} Siegel suggests that by choosing the second alternative, the student is demonstrating that the difference in utility between a B-grade and C-grade is greater than the difference in utility between an A-grade and a B-grade.\textsuperscript{62}

Brown proposes another cardinal utility based theory of aspiration. In Brown’s theory, a negotiator gets more utility from each dollar gained up to his or her aspiration level than from each dollar gained after his or her aspiration level. Essentially Brown is proposing a theory of diminishing marginal utility because after a negotiator meets his or her level of aspiration there is a decline in the utility gained from each additional dollar.\textsuperscript{63}

Implicit in this theory is the assumption that a negotiator is loss adverse.\textsuperscript{64} Loss adverse means that losses after the point of aspiration have greater utility consequences than gains equal in size.\textsuperscript{65} As a result, individuals care much more about the loss of a dollar relative to their aspiration point than the gain of a dollar.\textsuperscript{66}

\textsuperscript{59}Id.
\textsuperscript{60}Id.
\textsuperscript{61}Id.
\textsuperscript{62}Id.
\textsuperscript{63}INVESTOPEDIA, http://www.investopedia.com/terms/l/lawofdiminishingutility.asp (last visited Nov. 25, 2007). The diminishing marginal utility in Brown’s model is analogous to the diminishing marginal utility of wealth where “[t]he extra pleasure from each extra dollar of wealth is smaller than the pleasure from the previous dollar.” JEFFREY M. PERLOFF, MICROECONOMICS 578-79 (2001).
\textsuperscript{64}Korobkin, supra note 8, at 29-30.
\textsuperscript{65}Id.
\textsuperscript{66}Id.
B. Ordinal Utility Theory of Aspiration

The cardinal utility theories relied on by a few legal scholars provides interesting explanations about the role of aspiration in negotiation. However, the role of aspiration in negotiation can perhaps be explained more dynamically by an ordinal utility theory of aspiration. Aspiration can be viewed as a goal that maximizes utility subject to constraints and subjective preferences.\(^{67}\)

The proposed theory assumes that utility curves slope constantly upwards which means that a negotiator would always be happier with higher distributive outcomes.\(^{68}\) The assumption that a utility curve slopes constantly upwards makes intuitive sense. The proposition is supported by economic theory that a person is rarely worse off with extra gain.\(^{69}\)

Even though the proposed theory has an upward sloping utility curve, the negotiator’s aspiration is capped because of constraints – like time and money – and because of the negotiator’s subjective preferences.\(^{70}\) A hypothetical illustration of this process would be the choices faced by John, a negotiator, who has 50 hours to complete negotiation ‘A’ and negotiation ‘B’. The 50 hours available to complete both negotiations would represent a time constraint. John’s aspirations in negotiation ‘A’ and negotiation ‘B’ form a bundle reflecting his preferences.

\(^{67}\) See Weber, supra note 15, at 587 (discusses utility maximization subject to several constraints). Constraints can take the form of variables like time and budget. Id.

\(^{68}\) See PERLOFF, supra note 63, at 75.

\(^{69}\) See id. at 76.

\(^{70}\) See Weber, supra note 15, at 587.
In this scenario John’s aspiration in negotiation ‘A’ will be the point that maximizes utility subject to the constraint of time and to his subjective preferences. John will have to split the 50 hours between the two negotiations. John could split the time evenly or he may spend more or less time with negotiation ‘A’. How John decides to split the time, and the aspiration level he has for negotiation ‘A’, will be determined by any subjective preference that he has for one negotiation over the other.

The proposed theory also suggests ways in which aspiration levels change. Shifts in constraints and changes in preferences may increase or decrease aspiration levels. John’s aspiration level might increase in negotiation ‘A’ if he has a 100 hour constraint within which to complete negotiation ‘A’ and negotiation ‘B’ instead of the 50 hour constraint he was originally operating under. John’s aspiration level in negotiation ‘A’ might decrease if suddenly a new

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71 **Figure 1** (below) is the utility function for Negotiation ‘A’, holding the utility of negotiation ‘B’ constant. John’s utility increases with the more success he has in Negotiation ‘A’. **Figure 2** (below) is John’s indifference curve between Negotiation ‘A’ and Negotiation ‘B’. The indifference curve ‘I’ is a set of all bundles that John views as being equally desirable. The bundles comprise of goals in Negotiation ‘A’ and goals in Negotiation ‘B’. **Figure 3** (below) shows goal ‘A’ and goal ‘B’. Goal ‘A’ maximizes John’s utility in Negotiation ‘A’ subject to the time constraint and his subjective preferences. Any point preferable to ‘e’ lies outside the time constraint and so is not attainable.

![Figure 1](image1.png)  
**Figure 1**  

The utility function for Negotiation ‘A’, holding the utility of negotiation ‘B’ constant. John’s utility increases with the more success he has in Negotiation ‘A’.

![Figure 2](image2.png)  
**Figure 2**  

John’s indifference curve between Negotiation ‘A’ and Negotiation ‘B’. The indifference curve ‘I’ is a set of all bundles that John views as being equally desirable. The bundles comprise of goals in Negotiation ‘A’ and goals in Negotiation ‘B’.

![Figure 3](image3.png)  
**Figure 3**  

Goal ‘A’ and goal ‘B’. Goal ‘A’ maximizes John’s utility in Negotiation ‘A’ subject to the time constraint and his subjective preferences. Any point preferable to ‘e’ lies outside the time constraint and so is not attainable.

Jeffrey M. Perloff provides examples of utility functions, indifference curves and constraints in his microeconomics textbook. PERLOFF, supra note 63, at 87-102.  

72 See id.
consideration is added to the bundle. Perhaps suddenly John has to complete both negotiations and prepare for an exam.

C. Reference Point Theory

Both the cardinal utility and ordinal utility theories can be expanded to encompass reference point theory. Reference point theory suggests that aspirations are cognitive anchors that bias judgments; and that aspirations serve as relative points through which the value of transactions can be framed.

From the ordinal utility and cardinal utility theories, it can be inferred that a negotiator makes subjective evaluations of settlement proposals by comparing them to his or her aspiration in the negotiation as a reference point. And the process of comparison in turn affects the bargaining behavior of the negotiator.

The theory proposed by this paper allows for analysis to be taken a step further. The theory suggests that the negotiator’s aspiration levels in other activities also serve as reference points. Therefore, a negotiator may also make subjective evaluations of settlement proposals by comparing them to his or her aspiration levels in other activities. And the process of comparison in turn would again affect the bargaining behavior of the negotiator.

For example, if John has a high aspiration level in negotiation ‘B’ and a low aspiration level in negotiation ‘A’. If he uses both aspiration levels as reference points, he might accept a lower offer in negotiation ‘A’, than he would accept otherwise, so that he can focus more energy on negotiation ‘B’. While such utility maximizing behavior could prove beneficial to John, there are also dangers.

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73 Korobkin, supra note 8, at 32.
74 Id. at 32-33.
75 Id. at 30.
76 See id.
77 See id.
D. Benefits and Dangers of Aspiration Levels

Under reference point theory, high aspirations can lead to the success of a negotiator in a number of ways. For example, high aspirations can lead a negotiator to set higher reservation prices that skew the range of mutually agreeable outcomes in a beneficial way. Also, high aspirations can lead a negotiator to demonstrate more patience at the bargaining table. This may improve the negotiator's earnings when there is a settlement.

Under reference point theory, high aspirations can also create dangers. For example, aspirations can skew a negotiator's bottom line if it is set too high because the negotiator may get anchored to his or her position. When aspirations are too high, they can indirectly lead a negotiator to reject proposed agreements falling within an acceptable range of options. Also, aspirations that are too high may result in a misalignment of a negotiator's perception of fairness and an objective perception of fairness.

The above discussion of benefits and dangers of aspiration levels was by no means exhaustive, but hopefully it was enough to show that aspirations can be both good and bad.

CONCLUSION

In the cardinal utility theories, used by some legal scholars, aspiration in negotiation is a utility maximizing point after which negotiators become increasingly loss averse. While in the ordinal utility theory this paper proposes, aspiration in a negotiation is a goal that maximizes utility subject to constraints and subjective preferences.

The theory proposed in this paper suggests that aspiration levels can be increased and decreased by shifts in constraints and by changes in subjective preferences. It is practical to

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78 Id. at 56.
79 Id.
80 Schneider, supra note 2, at 678; Korobkin, supra note 8, at 32-33.
81 Id.
82 Id.
view aspirations as bound by considerations like the amount of time and money available. It is also practical to value some activities more than others and to adjust our aspirations accordingly.

This proposed theory, like the cardinal utility theory, can be extended to suggest that aspiration affects negotiation outcomes as a reference point. It can be inferred that a negotiator makes subjective evaluations of settlement proposals comparing them to his or her aspiration as a reference point. And the process of comparison in turn affects the bargaining behavior of the negotiator.

This paper’s theory can also be taken further in this regard than other theories used by some legal scholars. The theory implies a negotiator’s aspiration levels in other activities can also serve as reference points that are compared to settlement proposals for the purpose of making subjective evaluations.

There are many ways that minds better than this author’s can develop and test the theory provided by this paper. While this paper focused on each individual aspiration within a bundle, the entire bundle might be viewed as a collective aspiration that could be referred to as ‘the big picture’. In what ways would ‘the big picture’ influence a negotiation? A negotiator may fail to meet a goal in his bundle. How would this failure to meet a goal affect his or her other aspirations?

Aspiration is a topic of great interest to many negotiators. Hopefully this paper has contributed in a meaningful way to the existing literature on aspiration.

83 Korobkin, supra note 8, at 30.
84 See id.