

**Keynes' Attack on the Versailles Treaty: A Study of the Consequences of
Bounded Rationality, Framing, and Cognitive Illusions**

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Abstract

The Paris Peace Conference was arguably the most complex negotiation ever undertaken. The principal product of the conference, the Treaty of Versailles, failed to realize any of the major goals of its framers. Relations between Allies and with the defeated enemies seriously deteriorated as a consequence of the negotiations. Economic conditions in Germany, the rest of Europe, and eventually the United States deteriorated as well. At the time of the Treaty's publication, Keynes and a number of other participants predicted these events, pointing to the errors and oversights of the negotiators as a primary cause. The logic of Keynes' argument is re-examined in light of recent research on the psychology of human information processing, judgment and choice. It reveals that this approach is actually very consistent with and anticipates both Simon's conception of bounded rationality and recent work on cognitive heuristics and illusions. Negotiator bias has been studied almost exclusively using simple laboratory settings. The catastrophic lose-lose nature of the Versailles Treaty illustrates the way in which complexity necessitates the reliance on simplifying heuristics while propagating and amplifying the impact of the bias that is generated. Evidence from the treaty negotiations and the failed application of the treaty suggest some very significant boundary conditions for the application of rational choice models in business, politics, and international relations.

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Contemporary research on the psychology of bargaining and negotiation has developed Simon's (1947) argument that complexity forces boundedly rational agents to use mental short cuts. Heuristic methods for processing information, making judgments, and taking decisions economize on scarce cognitive resources and costly cognitive effort. It has been repeatedly demonstrated that these heuristic approaches generate predictable biases in judgment that then lead to an escalation of conflict, a failure to settle, or to considerable inefficiencies in terms of settlement (see Bazerman, et al 2000). It is commonly presumed that negotiations shaped by these flawed judgments may also damage relationships between the parties, thereby foreclosing future opportunities for collaboration or trade.

A disconcerting paradox of this literature is that these conclusions have been drawn from studies of what are actually almost all very simple negotiations between two monolithic individuals with no past and no future relationship at stake. These problems bear scant resemblance to the multiple issue negotiations that take place between multiple, faction-ridden parties with linkage considerations and a future relationship at stake (Eliashberg, Lilien, & Kim, 1995; Zartman, 1994). The paradox is an artifact of laboratory methodology that has dominated research in the area.

The effect of the paradox is that untested assumptions and a logical leap are needed to conclude that these heuristics are truly used to cope with the real complexity that characterizes actual business, political, or diplomatic negotiations. It is a further leap to conclude that cognitive bias ever generates impasse, escalation, inefficiency, or damaged relationships in the same way that

it appears to have done in many laboratory settings. The assumptions are certainly plausible, but largely untested.

Through experimental variations and forays into the field, research has begun to address the problem of generalizing to more realistic conditions. Some suggest that when motivation for cognitive effort is sufficient then reasoning will improve and dispel bias (De Dreu, Koole, & Steinel, 2000). By implication, when the negotiation is an important one, cognitive bias will have only a negligible impact. However a systematic review of 74 experiments found that while greater incentives frequently improved performance, there was no evidence that they consistently eliminated it (Camerer & Hogarth, 1999). A limited number of field studies have also been conducted. Camerer et al. (1997) showed that cab-drivers decisions regarding working hours exhibited the same biases found in the laboratory. Workplace incentives did not eliminate them. However they also found bias to be much less pronounced among experienced drivers, so perhaps experience and expertise check bias. Northcraft and Neale (1988) found a similar trend in the real estate pricing judgments of MBA students and professional agents. So the pattern of results to date suggests that bias may be diminished with experience and incentives. Of course none of these studies, including the field studies, have involved extremely complex problems or extremely high stakes.

This study takes a different approach that should provide a useful complement to laboratory and field research. It addresses the impact of negotiator cognition through a highly focused analysis of the Paris Peace Conference of 1919. The PPC was arguably the largest, most complex, and most far-reaching negotiation ever undertaken. Representatives from 27 nations, including the leaders of

the world's major powers, worked continuously in Paris for six months to craft an intricate system of treaties to end the First World War.

This analysis of the conference should serve a number of important ends. It clarifies the origins of the concepts of bounded rationality and cognitive illusion. It should substantiate the leap from laboratory phenomena to real complex negotiation, illustrating how negotiators cope with complexity in multilateral settings. In particular it demonstrates how highly correlated errors made over a series of complex sequential decisions can propagate and amplify cognitive illusions. In Paris, these amplified illusions appear to have greatly distorted the final settlement.

Four sections follow. First some background on the PPC is provided with attention to the features that make it a particularly interesting case. The second section summarizes conclusions about the Treaty published first by John Maynard Keynes and then subsequently by many other participant-observers at the conference. The third discusses evidence they provide and also draws from the official record regarding the cognitive illusions and their impact on the judgments and choices of the negotiators. Finally the concluding section summarizes the case and draws out the implications of this analysis for further research.

The Complexity of the Paris Conference

The PPC constitutes a unique attempt to craft a truly global settlement (Lentin, 2002). In addition to the territorial, military, and economic sections dealing with Germany, the PPC also attempted to resolve border disputes in China, Southeast Asia, the Pacific Islands, the Middle East, and Africa. The negotiators confronted the Bolshevik revolution in Russia, Zionism, and Arab, Balkan, and Irish nationalism. They created a new form of international organization, the League of

Nations, as well as the International Labor Organization and the World Court of Justice (Temperley, 1924). This ambitious agenda tested the very limits of the negotiator's ability to process information and make rational, far sighted decisions.

The case is particularly intriguing because the deleterious consequences of negotiator bias seen so often in the microcosm of the experimental laboratory appear to have played out in vastly magnified form on the diplomatic stage in Paris. The Versailles system was "a debacle" (Kissinger, 1984, p. 357). The United States Senate repudiated the treaty the President had just signed. The most important provisions either could not be implemented or unraveled disastrously during the 1930's. Attempts to execute the reparations terms created economic havoc in Europe, the United States, and eventually around the globe (Ferguson, 1996; Sargent, 1982; Trachtenberg, 1984; Schuker, 1988; Webb, 1989). The negotiation process, the substantive terms, and attempts to implement the treaty undermined democratic governments in Italy and Germany. The League of Nations, the centerpiece of the Versailles system and its intended enforcement mechanism, failed its principal task and was dissolved in 1945 at the conclusion of the far more devastating Second World War (Fleury, 1998).

This slide into a twenty year period of mutually destructive politico-economic disequilibrium indicates that the validity of the leap from laboratory findings to complex negotiations may actually have received its crucial field test nearly a century ago. Cognitive illusion and its impact on the negotiation process may have been a critical factor in setting the 20th century on course as the bloodiest in human history (a conclusion drawn by Kennan, 1996 as well as McNamara & Blight, 2001). Of course the combination of appropriate preconditions and predicted consequences only suggest the possibility, they do not establish it.

A full understanding of what went awry in the PPC will require a much broader investigation than is feasible here. Cognitive factors may have played a necessary role in the causal sequence of events but a complete explanation must encompass economic, organizational, and political forces as well. The purpose of this paper is a modest first step toward disentangling the complex web of interlocking negotiations and renegotiations. We begin by re-examining detailed accounts of the negotiation provided by participant observers who provided first hand descriptions of the decision making process that would shape the post-war world.

The top panel of Table 1 lists the plenipotentiary delegates of the five great powers. For purposes of economy, the delegates of the 22 smaller powers are not listed though they exercised considerable influence on particular decisions¹. The full delegations of each nation were considerably larger. The American mission alone numbered 1300 members at its peak (Gelfand, 1963). The lower panel of Table 1 gives a very incomplete listing of expert advisors who played an influential part in the process.

The participants realized the importance of the task they were undertaking. A very large number of them maintained diaries and wrote extensive letters recording their observations as the events unfolded (Gelfand, 1963). Many others subsequently published lengthy accounts of the negotiations and the decision making process. John Maynard Keynes, a financial expert in the British delegation, provided the first and most influential account of the negotiation. Keynes resigned his position with the British Treasury in protest of the terms and then published a detailed analysis of the negotiation and the dangers posed by the treaty (Keynes, 1920). Critical accounts would follow from members of the American and British delegations who added new details but pursued a similar line of argument. Some, like Keynes, presented their critique long before events

could confirm their pessimism (e.g. Baruch, 1920, Lamont, 1921, Lippmann, 1922). Others (Clemenceau, 1930; Dulles, 1940; Lloyd George, 1938) offered them in retrospect as the provisions of the treaty unraveled and the next war loomed. In the next section we re-examine the terms of the treaty and the critics observations. It can be shown that Keynes and the other critics worked from a conception of boundedly rational negotiation that anticipated many recent insights in cognition, judgment, and bargaining.

From a Principled Armistice to a “Carthaginian” Treaty

The primary complaint of the critics was also one raised by the German government – that the terms reflected neither the spirit nor the language of the Armistice under which the Germans agreed to lay down arms in October 1918. Through the signing of the Armistice, Woodrow Wilson had executed a unique form of principled diplomacy, an innovation in practice that prefigured much of what Fisher and Ury (1981; see also Fisher, Schneider, Borgwardt, & Ganson, 1997) would later come to call “principled negotiation.” In theory, the principled approach should lead to a just and wise agreement that preserves or strengthens relationships. Detailed examination of Wilson’s approach and its relationship to the Fisher-Ury model is beyond the scope of this paper (see Bottom, 2002). But the essence of Wilsonian diplomacy was that international conflicts should be settled by standards of justice rather than by force or simply to maintain a “balance of power” (Knock, 1998). The armistice specifically identified such Wilsonian principles as “open diplomacy,” “a peace without annexations or punitive damages,” “self-determination is an imperative principle of action,” and the formation of “a general association of nations” as the basis upon which the final settlement would be negotiated (Bottom, 2002).

The German reply to the first draft of the Versailles Treaty charged the Allies with abandonment of these principled aims and a breach of contract,

“The German Peace Delegation has completed its first examination of the Conditions of Peace which were handed to it. It has had to recognize that the agreed basis of the peace of justice has been abandoned on important points; it was not prepared to see that the promise given expressly to the German people and to all mankind would be rendered illusory in this fashion. The draft treaty contains demands which are not tolerable to any people. Much of it, moreover, in the opinion of our experts, is not possible of fulfillment.” (Brockdorff-Rantzau to Clemenceau, May 9, 1919; reprinted in Burnett, 1940, p. 1-2).

While minor modifications of the initial draft were subsequently rendered, the basic structure did not change (see Mantoux, 1992). The allied response of June 12th was in the form of an ultimatum:

“ the Allied and Associated Powers must make it clear that this letter and memorandum constitute their final word... As such it must be accepted or rejected as it now stands... If they (the German government) refuse, the armistice will terminate and the Allied and Associated Powers will take such steps as they think needful to enforce the terms.” (reprinted in Link, 1966-1992, vol. 60, p. 451).

The existing German government fell rather than submit. A hastily assembled successor government sent delegates who capitulated on June 28 at Versailles.

Keynes argued that once the armistice was signed and the Germans abandoned arms, that Wilson’s principles had served their purpose for the European allies. In his view, they subsequently drifted toward the pursuit of a myopic and opportunistic strategy of expropriating as much value as they possibly could from the settlement. This “Carthaginian approach” clashed with Wilson’s persistent but misguided attempts to structure a principled settlement. Through superior numbers and vastly superior skill, the Europeans outwitted, outsmarted, and duped Wilson (“a blind and deaf Don Quixote”, 1920, p. 41) into bargaining mistakes that turned the Treaty into a Carthaginian peace clothed in the insincere language of an idealistic and principled one.

The “Carthaginian” provisions encompassed all aspects of the settlement. Germany was stripped of its colonies leaving its industry without access to their vast natural resources. The territorial provisions (see Figure 1) cost Germany 25,000 square miles of territory. These new borders made millions of ethnic Germans citizens of new states in Austria, Czechoslovakia, Lithuania, and Poland. The so-called Polish corridor (see the strip surrounding Posen in Figure 1) awkwardly detached German East Prussia from the rest of the country. Germany was denied membership in the League of Nations. German Austria was constrained by a French veto from seeking unification with Germany whatever her national aspirations might be (The Treaties of Peace, 1924). As hard as these provisions were, the greatest and most long lasting dispute concerned reparation payments from Germany to the Allies.

During the armistice negotiations, the Allies stipulated and the Germans endorsed a particular conception of what Germany owed to the Allies.

“In the conditions of peace laid down in his address to Congress on 8 January 1918, the President declared that invaded territories must be restored as well as evacuated and made free. The allied governments feel that no doubt ought to be allowed to exist as to what this provision implies. By it they understand that compensation will be made by Germany for all damage done to the civilian population of the Allies and to their property by the aggression of Germany by land, by sea, and from the air.” (Lansing to Sulzer, November 5, 1918, reprinted in Burnett, 1940, p. 411).

The final treaty actually required an immediate payment of 20 billion goldmarks with the remaining debt and payments to be determined by an inter-allied commission by May 1921. The commission was granted considerable power to gather data on German commercial activity and to insure that levels of taxation were set appropriately. An appendix spelled out the categories of damage that Germany would be required to pay including the disputed decision to include the cost of military pensions (The Treaties of Peace, 1924). This and other problematic aspects of the Reparations issue

will be analyzed in some detail in the section on “The Cascade of Errors.”

Why would the European allies, for all their tactical brilliance, pursue such a rapacious policy if it were so strategically unwise and ultimately destabilizing and self-defeating? Since his primary focus was on documenting the unworkable nature of the final treaty terms, Keynes did not provide a complete answer, only fragments of it. It would fall to the other participant-observers – Baruch, Lamont, Lippmann, Headlam-Morley, Nicolson, and Dulles - to more fully flesh out the explanation. Each looked to “psychological factors” for their answers.

The Propagation of Cognitive Bias

The sheer number and range of issues, the number of interested parties, high stakes, time pressure, and the novelty of the problem all combined to place nearly unprecedented information processing demands on the negotiators. According to Nicolson (1933) these took a serious toll:

“Full allowance must be made for the very limited powers of endurance possessed even by the most muscular of human brains. Under the strain of incessant overwork, the imaginary and creative qualities are apt to flag: more and more does the exhausted mind tend to concentrate upon the narrower circle of immediate detail. (p. 66).

In a rational manner the PPC organizers sought to extend the limits on their own capability through data gathering, expertise, and organization. These decision aids were only partially successful in managing complexity. The leaders of the major powers were forced to rely heavily on their own judgment and intuition.

The critics’ contention was that unchecked bias in that judgment led to a series of mistakes that compounded and reinforced each other. The disastrous nature of the settlement was the compound effect of this cascade of errors. We first examine the sequence of mistakes identified by

Keynes, Lippmann, and Nicolson. We then discuss the psychological factors they diagnosed to be the primary cause.

The Cascade of Mistakes

Decisions were made both sequentially and simultaneously. Sequential errors would have a compound effect. Initial decisions of seemingly lesser importance came to have an impact on the later decisions. They framed the debate and shaped subsequent choices. These choices in turn constrained and shaped the final terms. To the critical observers, the full process became a cascade of highly correlated errors, each taking the final treaty further and further astray (Nicolson, 1933 describes this at some length). The correlation in the errors, including the earliest, they attributed to a set of psychological factors described in a subsequent section.

Wilson's Attendance. Until 1919 no American President had ever stepped foot on European soil while in office. Most observers in the United States and abroad assumed that Wilson would send a delegate to negotiate on his behalf. The great distance from Washington to the conference location, and the relatively slow means of transatlantic communication and travel, would leave him vulnerable to the development of domestic political opposition during his absence. His absence from the conference table, on the other hand, would afford him certain strategic advantages in staking credible commitments (Schelling, 1962), thereby enhancing his already formidable bargaining power (Keynes, 1920; Lloyd George, 1938; Nicolson, 1933). He would retain a crucial measure of veto power over critical provisions. If a proposal failed to conform appropriately to the principles he had articulated (and which formed the foundation of the Armistice) he could reject them from the comfort of the White House. None of these strategic considerations were lost on

Wilson's advisors, who urged him to remain in Washington. One Wilson confidante, the journalist Frank Cobb put the case this way in an appeal to the President's closest advisor:

“In Washington, President Wilson has the ear of the whole world. It is a commanding position, the position of a court of last resort, of world democracy. He cannot afford to be maneuvered into the position of an advocate engaged in personal dispute and altercation with other advocates around a council table... This is a mighty weapon, but if the President were to participate personally in the proceedings it would be a broken stick.” (Cobb to House, November 4, 1918, reprinted in Seymour, 1928, p. 211).

Wilson had by this time acquired an undeniable aura of greatness. His charismatic power was the product of American industrial might, the compelling language of his speeches, and the crucial role he played in ending the war. Venturing to Paris put that aura at risk and curtailed his veto power. As the British Prime Minister David Lloyd George put it in retrospect (1938),

“ a cable from the President of the United States intimating that he disapproved of some particular proposition and that, if it were inserted in the Treaty, he could not sign it, would have made it much easier for the French and British representatives to persuade their respective publics to accept modifications... But when he came to the Peace Congress his decisions counted no more than those of the Prime Ministers with whom he conferred”.

Locating the Talks. The location of international peace conferences is today a matter of very careful deliberation. Camp David, Oslo, Dayton, and Wye River were chosen to isolate the negotiators from the press of public opinion and to achieve a degree of balance between the parties. Jerusalem and Sarajevo would hardly be considered suitable for the purpose of effecting Palestinian or Balkan settlements. Yet in 1919, the Great Powers chose to hold the peace conference in an embattled city that had only recently been under siege by German forces. Keynes, Lippmann, and Nicolson would all point to this decision as a crucial early error.

Parisian public opinion had an acute impact on the negotiators. They could not escape it. Lloyd George (1938) likened the effect to negotiating with “stones clattering on the roof and

crashing through windows, and sometimes wild men screaming through the keyholes.” Nicolson (1933, p. 77-78) chose a different metaphor,

“We felt like surgeons operating in the ballroom with the aunts of the patient gathered all around. The French reacted ... in a most unhelpful manner. Almost from the first they turned against the Americans with embittered resentment... The cumulative effect of all this shouting outside the very doors of the Conference produced a nervous and as such unwholesome effect... The choice of Paris, therefore, became one of the most potent of our misfortunes.”

The full force of this pressure fell heaviest on Wilson, the leader attempting to argue for a principled settlement. The French press and public eventually turned much of their resentment and anger against him (Keynes, 1920; Nicolson, 1933; Noble, 1935). The extreme psychological, physical, and emotional toll, combined with a prior history of neurological disorder, culminated in what now appears to have been a small stroke midway through the conference. It ultimately contributed to the debilitating stroke he would suffer during his campaign for Senate ratification of the treaty (Weinstein, 1970).

The initial mistakes undercut Wilson’s bargaining power and that of the American delegation on matters of substance. The impact of this diminished leverage had its effect on the settlement reached with respect to reparations, German boundaries, and the presentation of the treaty to Germany. The approach taken in settling these questions made it impossible to implement and enforce the treaty.

The Blockade. Through British naval superiority, the Allies had maintained a highly effective blockade during the war. This prevented food and essential supplies from reaching German ports. Although the armistice included language concerning food shipments to Germany, the Allied leadership elected to maintain the blockade as a guarantee of German cooperation. Many

of the experts took exception to this policy on the grounds that it was immoral and struck the most vulnerable members of German society.

“One of the conditions of the Armistice was that we should let Germany have sufficient food. Four months elapsed before any food of any kind got into Germany, and the blockade ... was made even more strict than it was during the war... Cannot you imagine the feelings of the Germans when month after month went by after the Armistice and no step was taken towards bringing about peace or allowing food into the country, and they saw children and other people slowly dying from want of proper food? This has left a feeling of intense bitterness. It is I think an action, or rather an inaction, as indefensible as anything I have ever heard of. (Headlam-Morley to A.C. Headlam, June 25, 1919 reprinted in Headlam-Morley, 1972, p. 161).

The conference leadership began limited food shipments when the officers of the occupation troops began to complain widely about the appalling conditions in Germany. The argument that it was damaging the morale of the troops to see widespread starvation among women and children appeared to be persuasive (Headlam-Morley, 1972; Noble, 1935).

Reparations and Boundaries. Territorial issues at the PPC spanned the entire globe and virtually every troublesome conflict of the past century. A careful analysis of those negotiations is well beyond the scope of this paper but the essential features can be sketched. Stripping and redistributing the German colonies met little opposition from Wilson. The French initially sought German partition. They called for a new set of small independent states on the right bank of the Rhine that would constitute a buffer from a vastly reduced Germany. Wilson and Lloyd George were implacably opposed but Clemenceau logrolled his concession on this scheme into a series of other provisions. Wilson and Lloyd George agreed to a mutual security alliance (anticipating NATO in form and function) to safeguard France from future attack (Clemenceau, 1930). France also received 15 years of property rights in the coal rich Saar region to be followed by a plebiscite to determine final control (see Lloyd George, 1938; Nicolson, 1933). A military force would occupy, at German expense, the right bank of the Rhine for 15 years (The Treaties of Peace, 1924).

[Insert Figure 1 About Here]

As disruptive as the territorial terms proved to be, the dispute over reparations payments from Germany to the Allies challenged the conference more than any other issue. Complicating the problem was the limited experience and economic knowledge regarding the ability to transfer such great sums of wealth from one nation to another. It was actually by struggling with the practical problem created by the reparations problem that economists made substantive progress in developing theory (Schuker, 1988).

Because of the technical nature of the problem, the Council of Four delegated considerable authority to the Committee on Reparations and Damages (CRD). The heated conflict within the committee spilled over various subcommittees, working groups, and finally back to the Council of Four. The Americans pressed to insert a modest fixed sum constituting Germany's total obligation. This approach would reflect the Allies legitimate claims under the armistice, Germany's vastly reduced wealth, and the pressing need to begin rebuilding. The other delegations demanded reparation in full.

Dulles, the American legal advisor, eventually devised the two-part compromise that broke the deadlock. Article 231 declared:

“The Allied and Associated Governments affirm and Germany accepts the responsibility of Germany and her allies for causing all the loss and damage to which the Allied and Associated Governments and their nationals have been subjected as a consequence of the war imposed upon them by the aggression of Germany and her allies.”

Germany owed the Allies for the full costs of the war. Article 232 required the initial 20 billion goldmark payment and established the inter-allied commission to devise the final bill (The Treaties of Peace, 1924). This creative open-ended solution cleverly reconciled the conflicting views (the

British and French got the high theoretical 231 while the Americans got what they could presume would be the lower, but postponed 232). But it also had severe drawbacks.

“There is a great difference between fixing a definite sum, which though large is within Germany's capacity to pay and yet to retain a little for herself, and fixing a sum far beyond her capacity, which is then to be reduced at the discretion of a foreign commission acting with the object of obtaining each year the maximum which the circumstances of that year permit. The first still leaves her with some slight incentive for enterprise, energy, and hope. The latter skins her alive year by year in perpetuity, ... however skillfully and discreetly the operation is performed.” (Keynes, 1920, pp. 167-168).

Keynes concluded that the numbers contemplated by the Allies during the negotiations could never be obtained. Addressing the categories of damage the commission would use to calculate the total, he noted that most, “indeed about twice as much again as all the other claims added together,” would be due to the cost of military pensions. The inclusion of pensions as an expense for reparation struck him as a flagrant violation of the armistice agreement that Germany owed the Allies for “damage done to civilian populations.” Many others agreed, “We couldn’t find a single lawyer in the American delegation that would give an opinion in favor of including pensions. All the logic was against it.” (Lamont, 1921, p. 272; see also Baruch, 1920; Nicolson, 1933).

Under Article 232, Germany’s true debt burden remained a source of overwhelming uncertainty. This blocked capital flow needed to begin reconstruction since prospective lenders had no idea of Germany’s debt and so deferred assuming inordinate risk (Schuker, 1998). It also represented a genuine gamble on social psychology - a bet that passions would abate sufficiently to permit a deliberative process to fix a proper bill under American leadership. The gamble went wrong quickly. American rejection of the treaty unfortunately meant that it would actually have no formal standing on the Reparations Commission that fixed the “London Ultimatum” of May 1921¹

(Lamont, 1921). The schedule was ultimately the product of Anglo-French bargaining. Its terms were harsher than Dulles and his colleagues would have predicted in 1919 and they contained a massive subterfuge involving 3 different classes of bonds. The distinction was purely designed to maintain the public illusion of full restitution (the “C” class of bonds was the illusion, not intended to actually be paid, Keynes, 1922). The mark began the precipitous fall that turned into total collapse in 1923 (Trachtenberg, 1984; Webb, 1988).

Drifting Toward an Ultimatum. We have already noted that Clemenceau’s original scheme called for a full congress of all the belligerents. While never formally adopted, through the better part of the conference no one specifically challenged the concept. Nor did they notify the Germans or the Austrians that it was not to take place. As time passed however the need to finalize terms and demobilize armies took greater and greater precedence. Wilson’s domestic political situation would only deteriorate in his absence. French fears that Germany would split the allies and find common cause with Wilson had grown. Fatigue set in.

Rather than a Congress, the Allies instead summoned German plenipotentiaries to stay under heavy guard at Versailles while they remained in Paris (Mantoux, 1992). They were given the opportunity to read the full version of the treaty upon its completion and to submit written questions of clarification within a finite time period. The Germans worked to turn this into a bargaining game of sorts, though it was a heavily constrained process. They were able to achieve modest revisions to some of the terms of the treaty. But the points of greatest concern – League membership, the loss of colonies, reparations, the Saar Basin, and military occupation zones, were not materially altered. After a period of exchanging written notes, the Allies formally issued their ultimatum and the Germans reluctantly signed (Temperley, 1924).

The occasion for handing over the treaty and for signing it were extremely formal ceremonies with virtually no opportunity for communication between the delegations. The limited communication that took place at the initial presentation ceremony caused tremendous confusion and seriously deepened mistrust (see Boemeke, Feldman, & Glaser, 1998). The signature ceremony was held in the Hall of Mirrors, symbolic because Bismarck had declared victory over France and the founding of the German Empire in the same room in 1871.

The minimal German voice, the heavy-handed symbolism, and the final ultimatum would combine with the harsh terms of the treaty to severely disillusion German citizens of all points on the political spectrum. Max Weber, in Versailles as an advisor to the German delegation, urged them to reject the ultimatum. “If I am a personal proponent of the idea of saying ‘We reject the treaty; occupy Germany and see how you can get your money’ then it is because certain conditions are such that, in the event of rejection, we will inescapably suffer the most extreme consequences and that, in the event of acceptance, we will suffer those consequences anyway” (cited in Mommsen, 1998, p. 540).

The intense passion and anger felt in Germany at this turn would not surprise contemporary students of ultimatum bargaining. As Pillutla and Murnighan (1996) demonstrated, even experimental subjects negotiating over minimal stakes are easily provoked to anger and spite when presented with a one sided ultimatum. The financial advisors (bankers such as Warburg) and center-left politiciansⁱ were those who urged caution, conciliation, and further negotiation as the best means to a better future. Hitler would quickly move to exploit widespread German rage and disillusionment against their failures. He led a relentless propaganda campaign against “the Versailles diktat” and the “November criminals” who conspired to overthrow the empire, betrayed

the military effort, and turned Germans into slaves of the Allied powers (Baynes, 1969; Kershaw, 1998).

Judgment and Negotiating Strategy at the PPC

In diagnosing the causal factors responsible for this cascade of errors, Keynes was the first to suggest that psychological factors were at play. Lippmann and Nicolson took the argument further. For both, it was the confluence of public psychology, the politics of representation in a democracy, and the psychology of the leaders who actually negotiated in Paris that created such a troubled process.

Anchoring. The lowball offer is a time honored tactic of hardball negotiators. The extreme surprise it engenders sows doubts in the other party's mind about their own judgment of the bargaining zone, skewing the concession making "dance" onto asymmetric terms. As Kahneman and Tversky (1972) documented, the technique is particularly powerful because people tend to anchor their estimates of an uncertain event on a salient, sometimes highly arbitrary, starting point and then adjust it in the direction of the other evidence, but insufficiently so. Its impact on bargaining has been established through systematic experimentation (Pogarsky & Babcock, 2001; Bottom & Paese, 1998; Northcraft & Neale, 1988).

According to Keynes (1920, 1922), the French and to a lesser extent the British took clear advantage of this psychology to influence the bargaining process.

"the lead was taken by the French, in the sense that it was generally they who made in the first instance the most definite and the most extreme proposals. This was partly a matter of tactics. When the final result is expected to be a compromise, it is often prudent to start from an extreme position; and the French anticipated at the outset -- like most other persons -- a double process of compromise, first of all to suit the ideas of their allies and associates, and secondly in the course of

the peace conference proper with the Germans themselves. These tactics were justified by the event.” (p. 28)

He experienced the impact of anchoring first hand in the debate over reparations and German capacity to pay. Dulles was forced from the outset to wage a spirited campaign to dissuade the other Allies from their initial demand that Germany pay for the entire cost of the war,

“We may have ... very definite views as to the reparation which could in justice be required of Germany. But the occasion for the presentation of such original views was in the early days of November 1918 and not today... the reparation to be exacted from the enemy is that which is due in accordance with a fair construction of the written agreement of the Associated Governments with Germany”. (Dulles speech to the CRD reprinted in Baruch, 1920, pp 289-297).

French claims that German was capable of paying as much as 800 billion goldmarks further surprised the Americans, vastly exceeding any numbers they had contemplated. They adjusted their own planned first estimate/offer upwards in response (Burnett, 1940).

A perceptive reviewer noted that the extreme Allied demands represented first moves only at the conference itself. The earlier moves in the conflict shaped perceptions as well. The extreme positions staked at the conference were at least in part a tactical response to counteract the anchoring induced by Wilson’s speeches and the qualifications of the armistice. Since the Germans were not privy to the ongoing deliberations in Paris, their salient anchors for evaluating the terms remained Wilson’s speeches and the Armistice agreement. These inflated hopes for modest terms to a great extent among ordinary citizens but to some extent even among the elites. Many German citizens believed they had surrendered to Wilson’s principles, not to a defeat in the field. (McNamara & Blight, 2001; Mommsen, 1998).

Keynes’ anchoring analysis had one further implication. As the organizers improvised the final steps in the process, there was to be no real second set of compromises with the Germans,

which he concluded the French had anticipated. This meant that extremes in the draft treaty essentially survived what was largely a matter of imposition by ultimatum in the second round .

Stereotypes. Though he did not use the term, Keynes was the first to connect mistakes made at the Peace Conference to errors in judgment introduced by the reliance upon simplistic national stereotypes. As is now well understood, individuals frequently make predictions about the probability of a behavior by other groups or individuals based on the degree to which it fits a stereotype of the group or individuals (Kahneman & Tversky, 1973). Keynes concluded that the judgment of the many delegates at the conference was distorted by simplistic predictions of the behavior of "Huns" and "Bolsheviks". Clemenceau's insistence on punitive "Carthaginian" terms he attributed to a rigid German stereotype:

"he was a foremost believer in the view of German psychology that the German understands and can understand nothing but intimidation, that he is without generosity or remorse in negotiation, that there is no advantage he will not take of you, and no extent to which he will not demean himself for profit, that he is without honour, pride, or mercy. Therefore you must never negotiate with a German or conciliate him; you must dictate to him. On no other terms will he respect you, or will you prevent him from cheating you.

Two years later, Walter Lippmann created the field of social cognition (Allport, 1955; Macrae & Bodenhausen, 2000) with his book "Public Opinion," the product of his work on the wartime propaganda effort and the peace negotiations. Lippmann formally introduced the concept of "a stereotype," "the pictures in our heads", as a means of explaining how the judgment process of the negotiators at the PPC had led them astray. His analysis of the negotiation closely reflects Keynes's earlier writing.

"Of the great men who assembled in Paris to settle the affairs of mankind, how many were there who were able to see much of the Europe about them, rather than their commitments about Europe? Could anyone have penetrated the mind of M. Clemenceau, would he have found there images of Europe of 1919... Did he see the Germans of 1919 or the German type as he had learned to see it since 1871? He saw the type and ... took to heart those reports and it seems those only, which fitted

the type that he had in mind. If a junker, blustered that was an authentic German. If a labor leader confessed the guilt of the empire, he was not an authentic German.” (Lippmann, 1922, p. 55).

Inspired by Lippmann’s theory, Katz and Braly (1933) soon conducted the first systematic empirical investigation of national or ethnic stereotypes. Based on an adjective checklist they discovered that Princeton undergraduates showed the greatest agreement as to the characteristics of Germans, Negroes, and Jews. They believed the typical German to be “Scientific-minded, industrious, stolid, intelligent, methodical, and extremely nationalistic”. Keynes’ (1920) earlier treatment of the German stereotype was purely to document the shortcomings of the treaty and make the case for wholesale revision. Lippmann generalized from their failure, drawing ominous conclusions about decision-making in democratic societies and the influence of mass media on stereotype content and availability.

The official conference documentation yields many instances where crucial judgments and choices appear to hinge on the operation of simplistic stereotypes. The pervasive Bolshevik stereotype, based on a viral model, appears to have been pivotal in precluding direct discussions with Soviet representatives (see references to the “cordon sanitaire” in Link, 1966-1992, vol. 54). The most fundamental judgment for any negotiator is an analysis of the strength of their "threat point" (Nash, 1953) or "BATNA" (Fisher & Ury, 1981). The interpreter's notes record the first discussion of threat points during a meeting of the Council of Four on April 8, 1919 (Mantoux, 1982), four months into the negotiation. Lloyd George brought their attention to the overdue need to consider this crucial source of uncertainty. The only obvious recourse was to restart the war, invade Germany, and force the peace. Lloyd George foresaw risks. Clemenceau’s very high confidence was based on a direct invocation of the German stereotype. Colonel Edward M. House attended the meeting on behalf of Wilson.

Lloyd George: "I suggest we ask our generals and admirals to prepare these plans, based on different possibilities: (1) if we have no one before us with whom to sign; (2) if the Germans refuse to sign.

Colonel House: What will you do?

Lloyd George: We might have to occupy Berlin. But I don't know whether that will serve any purpose.

Clemenceau: "I think it will; the Germans are a servile race."

No serious planning for this BATNA would occur until June, after the Germans had received the treaty and doubts grew whether they would sign. At that point, the Four were stunned to learn from the military that occupation of Berlin was not feasible.

“As we advance we will need increasing numbers of occupation troops all the more important because we will have all of Germany on our hands. [We must] ... avoid this ruinous occupation, which can take us to Berlin too anemic to deliver the decisive blow” (Marshal Foch to Council of Four, June 16, 1919, Mantoux, 1992, p. 466).

Foch advocated a complex alternative BATNA with an Allied advance only to the Weser River coupled with a diplomatic initiative to sequentially detach the occupied regions. This combination would increase the pressure to capitulate on a rump Germany. None of the very unhappy but presumably far more politically astute Council members shared Foch's confidence in this approach (Mantoux, 1992, pp 468-475). So what was the BATNA and what were the odds of its success? Events overtook the Council so it never fully resolved this question. The magnitude and impact of the miscalculation is incontrovertible. The negotiation strategy the Allies pursued over a five-month period was founded on an erroneous overestimation of their true bargaining leverage. Their perception of the risks they were running in pursuing a hard line in the negotiations with Germany were a vast underestimate of the true risks.

Clemenceau's eventual successor Raymond Poincare later undertook an experiment on the viability of occupation, the stereotype of German "servility," and the feasibility of forced partition. When the Germans fell behind in the payments demanded under the London Schedule, Poincare sent in troops to occupy the Ruhr in early 1923. He miscalculated badly; industrial production and reparations payments virtually ceased and the mark collapsed. The British pound was trading for 250 million marks by September (Trachtenberg, 1982). The explosive surge in prices impoverished German citizens, though wildly unevenly, fueling bitter class frictions and galvanizing the nascent Nazi movement in Bavaria (Kershaw, 1998). Memories of that experience created so much concern for renewed inflation that it severely constrained German financial response during the economic downturn that brought the Nazi's to power at the end of the decade. What might have remained a modest slump became instead a prolonged, full-scale depression (Ferguson, 1996; Schuker, 1988).

Overconfidence. Lippmann argued that stereotypes, while hazardous, were also a necessary means of learning, reasoning, and making judgments. They play a particularly important function in negotiation settings where information is scarce and the primary sources of information (namely the other parties) may not be credible or reliable. As a source of hypotheses about differences and therefore about possible efficiency enhancing tradeoffs, stereotypes can play a constructive role in overcoming the tendency to perceive bargaining as a zero sum game (Bottom & Paese, 1997). The risks of reliance on stereotypes are acute when the decision-maker also suffers from overconfidence in their validity. As Lippmann put it, "what matters is the character of the stereotypes *and the gullibility with which we employ them.*" (p. 60)

A belief that one's forecasts of uncertain future events are more accurate than they truly are has been documented in many different settings with many different types of forecasters. Yates et al (1989) found it in the judgments made by American, Chinese, and Japanese students. Christensen-Szalanski & Bushyhead (1981) found it in the diagnostic judgments of family practice physicians. Roll (1986) argued that, in the extreme form of "hubris", it was responsible for the robust market in mergers and acquisitions that persists despite the dismal track record of acquiring firms. Hambrick & Hayward (1998) provide empirical evidence that those executives most likely to be prone to hubris were in fact the most aggressive bidders in the merger market.

Unfortunately it appeared to most observers that overconfidence was pervasive among the conference leadership. This observation was made by the participant-critics of the treaty (Keynes, 1920; Lippmann, 1921) and by its most ardent defenders (Lloyd George, 1938; Tardieu, 1921). Even in negotiations far less complex than the PPC, a host of uncertainties require consideration. Here they were manifold and the fate of the conference hinged on the accuracy of the predictions. How long would it take to draft a treaty? What were the odds on Lenin's government surviving in Russia? Could it be toppled with Allied support? What was the capacity of Germany to pay reparations? What was the likelihood that Germany would sign the treaty? What were the odds of success of an inter-Allied invasion in the event that Germany refused to sign?

In many respects the most fateful of those uncertain events was whether America would be a party to the treaty. Entering into such a treaty required the approval of a 2/3 majority of the U.S. Senate. From November 9, 1919 to March 19, 1920 the treaty in either its original or amended form was put to a vote three times. The original treaty went down 38-53, the amended versions by 39-55 and for the final time by 49-35. War between the United States and Germany and Austria would

not formally end until July of 1921 with separate treaties signed in October of 1921 (Clemenceau, 1930).

The consequences of this miscalculation were great. The League suffered a blow in prestige and capabilities with the absence of the U.S. It is interesting to ponder how successful it might have been with American involvement and sponsorship. Even a fully functioning United Nations has had difficulty establishing its role as a peacekeeping and peacemaking body. But the loss also cost Wilson his health and ultimately the Presidency. Internationalism was severely stigmatized and the U.S. withdrew into the Harding and Coolidge era of isolationist “normalcy”.

Two other tangible casualties of the Senate rejection were the American seat on the reparations committee and the mutual assistance pact between France, Britain, and the United States. The latter meant that Clemenceau’s primary strategic objective and greatest negotiating accomplishment was lost (Clemenceau, 1930). The former meant that no American member was in a position to moderate the Anglo-French demands that led to the London Ultimatum of May, 1921. What is striking is the lack of consideration given during the PPC to this possibility. Crucial decisions were taken in confidence that America would be a party to the agreement.

One delegate entertained no doubts until the very end - Woodrow Wilson himself. Hambrick and Hayward (1998) have shown that the tendency for business executives to pay excessive premiums to acquire other firms appears to be related to recent organizational performance and to adulatory coverage of the CEO in the business press. “Media praise serves to reinforce the CEO’s confidence”, “fostering the impression that the CEO is in control, efficacious, perhaps even a miracle worker” (p. 108). They begin to believe their own hype. Certainly no CEO in history has received coverage that could compare in hyperbole to that which Wilson received around the world when the Armistice ended the carnage of the war.

Wilson's arrival in Brest and then in Paris was received with understandable jubilation. According to the French press reports it "was a moment of unspeakable emotion"; "Never has a king, never has an emperor received such a welcome"; "Everywhere music, resounding national anthems, hard to distinguish because of the joyous cries which go up from the crowds"; "In all our life we have not heard such acclamations" (Noble, 1935; p. 73).

Press coverage from the middle and from the left was similarly euphoric. Consider these lines from the socialist paper *L'Oeuvre* of December 15, 1918: "Wilson, you have saved our children. Through you evil is punished. Wilson! Wilson! Glory to you, who, like Jesus, have said Peace on Earth and Good Will to Men!" (Noble, 1935, p. 73). Given his string of accomplishments - maintaining American neutrality for most of the war, entering the war decisively, giving a series of speeches which were received around the world with an almost religious fervor (Nicolson, 1933), brokering the end of the war, and arriving in Europe to such acclaim - it all must have made the prospect of winning treaty approval seem foregone. The earliest errors in the cascade of errors -- Wilson's willingness to hold the conference in Paris and his insistence on conducting the negotiations first hand -- reflect a profound sense of self-efficacy. He showed no signs of public or private doubt about Senate ratification before the conference, during the conference, or even during the fateful campaign for ratification.

Absolute confidence rendered contingency planning on the part of the other Allies impossible. Clemenceau (1930) acknowledged both the absence of planning and the obstacle posed by Wilson's hubris,

"There were only two men with whom the question (of U.S. ratification) could be usefully discussed. President Wilson and Colonel House, his alter ego, were proud men. To all my questions as to the issue that might be expected President Wilson invariably replied with an imperturbable confidence that he counted for certain on a favorable one. Colonel House was not so unreservedly optimistic, but he had faith in his President." (p. 243)

Outcome Framing. Why were the French and the British able to take the initiative at the bargaining table, engage in such extreme posturing, and brinksmanship? To Keynes, Wilson's leverage was disproportionate. His charismatic leadership had proven decisive in ending the war.

“In addition to this moral influence the realities of power were in his hands. The American armies were at the height of their numbers, discipline, and equipment. Europe was in complete dependence on the food supplies of the United States; and financially she was even more absolutely at their mercy. Europe not only already owed the United States more than she could pay; but only a large measure of further assistance could save her from starvation and bankruptcy. Never had a philosopher held such weapons wherewith to bind the princes of this world.” (1920, p.38)

Keynes suggests that the answer is directly related to a widely studied psychological influence on decision-making. In their influential prospect theory of choice, Kahneman and Tversky (1979) established that people evaluate outcomes relative to a reference point, that there is diminishing marginal sensitivity to changes in value of both gains and losses, and that the valuation of losses is greater than that of equivalent gains. These characteristics of utility lead to a tendency for individuals to be risk seeking for losses, risk averse for gains, and to experience “loss aversion”.

Experiments in bargaining indicate that in most circumstances those bargaining to minimize or eliminate a loss are much more likely to take extreme positions, to engage in contentious tactics, and to reach an impasse than those who are bargaining to maximize gains (Bottom, 1990; Bottom & Studt, 1993; De Dreu, Carnevale, Emans, & van de Vliert, 1994). They are much more likely to engage in highly risky tactics such as ultimatums and brinksmanship. They tend to win those battles from positively framed counterparts. Or else both sides lose.

Levy (1997) addressed the challenges of using behavioral decision theory to understand international relations. In his view, research priority must be given to developing specific hypotheses regarding the framing of foreign policy decisions. These must be cast in such a way that they carefully distinguish predictions derived from prospect theory from those derived from rational

choice theory. The asymmetries in the framing of outcomes among the Big Four in Paris were on a truly unprecedented scale, marking it as a particularly promising case for such testing.

The British, French, and Italians had all suffered staggering losses in manpower, material, physical capital, and national wealth (see Figure 3). Submarine warfare had imposed huge losses on the British fleet, the lifeline of its empire. Most of the western war was fought on French soil. The destruction there included the loss of 1857 square miles of forests, 8000 square miles of farmland, 300000 homes, 6000 factories, 1500 schools, 1200 churches, and 1,300,000 head of livestock (Clodfelter, 1992).

To Keynes' it appeared that France, and to a somewhat lesser extent the other European negotiators, had narrowly framed the issues around the elimination of these losses rather than long term opportunities, possibilities, or repercussions:

“The future life of Europe was not their concern; its means of livelihood was not their anxiety. Their preoccupations, good and bad alike, related to frontiers and nationalities, to the balance of power, to imperial aggrandizements, to the future enfeeblement of a strong and dangerous enemy, to revenge, and to the shifting of their unbearable financial burdens on to the shoulders of the defeated.” (1920, p. 56)

By maintaining American neutrality until the very end, Wilson left the nation in a privileged position. The decisive impact of American intervention gave it a preeminent position at the bargaining table. But their military forces suffered comparatively light casualties. The American industrial base was not only intact, it had grown substantially from its opportunity to supply the combatants. The war in Europe had quickly lifted the U.S. economy out of a temporary slump and into a vigorous and sustained expansion (Friedman & Schwartz, 1963). Inter-Allied debt was virtually all owed to the United States (Keynes, 1922). America alone could look forward to the post-war rebuilding process as a tremendous economic opportunity.

The more risk averse bargainer generally has less leverage than their counterparts (Osborne & Rubinstein, 1990). Experimental evidence confirms that framing asymmetries shift risk preferences and erodes the bargaining power of the positively framed player (Bottom & Studt, 1993). This pattern is highly consistent with process that unfolded at the PPC. The British, the Italians, and especially the French approached the negotiations with a sense of desperation that the Americans could not appreciate. The Europeans were willing to tolerate considerable delay and to seriously contemplate the complete collapse of the talks if it gave them a possibility of victory in this narrowly framed sense. To the Americans, concession or compromise seemed vastly preferable to the risks the Europeans insisted on taking.

It may be possible to directly trace some of the cascade of errors to these asymmetries in framing. The U.S. and Great Britain willingly conceded to France on issues of ceremony, giving much less emphasis to symbolic considerations. The location of the conference and the arrangements for the signature ceremony largely reflected French preferences. Wilson and Lloyd George expressed some concerns over these choices but quickly conceded to French demands. Since France had clearly lost far more in the war, it seemed particularly contentious to resist their request to host the conference or to arrange ceremonial matters (Nicolson, 1933).

The signing of the Treaty was held on June 30 in the Hall of Mirrors. Nicolson described the events in his diary, “They march in single file... And then, isolated and pitiable come the two German delegates, Dr. Muller and Dr. Bell. The silence is terrifying. Their feet ... echo hollow and duplicate. They keep their eyes fixed away from those two thousand staring eyes, fixed upon the ceiling. They are deathly pale... It is all most painful. (p. 368). In his diary entry that day, House (see Seymour 1928, p. 487) likened the ceremony to “olden times, when the conqueror dragged the

conquered at his chariot wheels. To my mind it is out of character with the new era which we profess an ardent desire to promote.” Headlam-Morley went further:

“The one thing which was forced on one by the whole scene was that it was the revenge of France for 1871; ...it was the room in which Germany, having won a victory, inflicted a great humiliation upon France. France now once more having got the upper hand was having her revenge for injury done to her, and in every detail complied with the utmost insult to Germany ... Just the necessary note of reconciliation, of hope, of a change of view, was entirely wanting.” (Headlam-Morley to Koppel, 6/30/1919, reprinted in Headlam-Morley, 1972, p. 178

What appeared to be the less important symbolic matters to England and to the United States meant a great deal more to the French. Conceding symbolic and ceremonial matters to France would in itself then seem to constitute a nice bit of value creating logrolling. Unfortunately, symbolism also had considerable importance in Germany. Losses, even symbolic ones, loom large and the political debate during the Weimar regime often reflected these symbolic blows as much as the substance of the treaty (Kershaw, 1998; Schuker, 1988).

One might actually characterize the greatest gamble taken at the conference to be one made by the positively framed Woodrow Wilson. Wilson’s decision to link the treaty to the covenant and his resistance to any Senate amendments that might enable passage of the treaty certainly constituted brinksmanship. Ex post it appears to be an extremely risky and fateful decision. But characterizing the degree of ex ante risk an individual is taking in a given choice depends on their perception of the expected value of the upside and the downside coupled with their highly personal beliefs about the likelihood of different positive and negative outcomes (Weber and Milliman, 1997). As virtually every observer documented, Wilson’s subjective probability of the success of his undertaking was near certainty (Keynes, 1920; Nicolson, 1933; Seymour, 1928; see also Weinstein, 1970). His self-confidence in his oratorical and persuasive talent was extremely high. Under the circumstances it appears as though he believed that this was not really a gamble and he

was not really taking a risk. The same cannot be said of the tactics of the British, French, and Italians. They certainly understood many, though not all of the uncertainties they faced, but chose to take them anyway.

Discussion

Unraveling the complexities of the PPC and the Versailles Treaty system will clearly require much more than it was feasible to attempt in this paper. A full explanation will eventually need to encompass cognitive, economic, political, and organizational theory. The objective here was modest. We revisited the arguments and explanations of the earliest critics of the Versailles system in light of recent advances in understanding the limitations on human information processing, judgment, and choice. That investigation, while far from conclusive, yielded some important insights.

The claim is frequently made that laboratory findings regarding judgment bias or bargaining inefficiency have little significance for real economic and political behavior. With greater incentives, with more experience, with the disciplining effect of political or economic competition, and through the powers of specialization and organization, judgment will improve and bias will dissipate. Choices will come to closely approximate expected utility maximization (Friedman, 1953; Lucas, 1986; Zeckhauser, 1986). Laboratory methods will perhaps never refute these arguments in a fully satisfactory manner. Evidence of generalizability from systematic field investigations is emerging, but still open to interpretation.

Moreover none of these settings offers a true measure of the critical conditions that could challenge the limits of human rationality. Cabdrivers' choices about working hours (Camerer, et al.

1997) and parimutuel bets on horses (Thaler & Ziemba, 1988) are well-structured decisions with ample opportunity for repetition and learning to do better. The Paris Peace Conference of 1919 was sufficiently complex to tax the most capable, expert, and efficient of processors. It had few good precedents. If the participant-observers are correct, the challenges appear to have defied experience, expertise, incentives, and organization.

The critics shared the belief that the complexity of the problem and the passionate motivation of the negotiators influenced them in a profound way. Most agreed that they themselves had been party to a repeated and mutually reinforcing cascade of errors. If they were correct, then the conference provides evidence that dramatically raising the stakes may actually magnify and amplify the impact of bias many times over. Nicolson (1933, p. 7) may have put it best, “Given the atmosphere of the time, given the passions aroused in all democracies by four years of war, it would have been impossible even for supermen to devise a peace of moderation and righteousness.”

The boundedly rational men of the conference appear to have crafted instead an unworkable and highly unstable settlement. It undermined peace and security, contributing to a far bloodier and more tragic war than the one it ostensibly ended. The observers notes on these events and their causes are clear on these issues even though they lacked clear terminology to discuss bounds on rationality, computational complexity, incredible threats, or judgment heuristics.

Dulles, later a major architect of U.S. cold war policy, was one of the participant-observers at the PPC. As legal advisor to the American delegation he made the cogent, powerful, and ultimately successful arguments against imposing the full costs of the war against Germany (Burnett, 1940). His failure to persuade his French, British, and Italian colleagues to limit reparations to a fixed, clearly attainable sum ultimately led him to draft the fateful compromise

language on reparations that would end up in the final treaty. On the eve of the second world war, Dulles looked back at the PPC and concluded,

“It is easy ... to draw the conclusion that those who then played important parts on the world’s stage were blind and stupid. Such a conclusion is warranted, but it is unimportant. What is important is to find the reasons for this blindness and stupidity which are now apparent. This, I think, cannot be adequately explained in terms merely of individual deficiencies. Rather it seems consequent upon the operation of general principles. There are usually blindness and inadequate perception when emotion becomes the directive of human action (1940, xiv)”

A broad stream of research has followed from Simon’s conception of bounded rationality to the focus on cognitive heuristics to the study of these heuristics in negotiation and other competitive social settings (Camerer, 1997). One interpretation of this stream is that considerable progress has been made in identifying and establishing some of the “general principles” Dulles felt must be responsible for the blind spots of the PPC negotiators. In the case of stereotypes and the heuristics of availability and representativeness, it was the disastrous course of the PPC itself that initiated the research beginning with the critical observations of Keynes and Lippmann.

Any conclusions as to rationality must remain conjecture at this point. A complete analysis of the diaries, letters, and memoirs of the participant observers is an important starting point. But systematic study of the primary source materials on the proceedings of the conference and through the long-term process of treaty revision is an essential step (Jonsson, 1991). Hypotheses regarding rational choice explanations and behavioral decision theory explanations must be carefully constructed to specify divergent predictions (Levy, 1995; O’Neill, 2001). The evidence must be gathered in such a way as to facilitate testing.

Even when they converge, second hand accounts of events remain susceptible to alternative interpretations. It is possible that Keynes, Nicolson, Dulles, Headlam-Morley, Lippmann, Lamont

and many of the other critics simply did not understand what Wilson, Lloyd George, Clemenceau and Orlando were attempting to accomplish and what their true beliefs were. Lloyd George's account in particular was a highly political document intended to protect, advance, and/or salvage his own legacy following Hitler's rise to power (Lentin, 2001).

Williamson (1985) advanced a "semi-strong" conception of rationality that retains the notion of maximization while acknowledging human limitations of attention and memory. Individuals may be influenced by severe limitations but organizations can use the benefits of specialization, expertise, and organization to extend limits and mitigate bias. It is evident from the PPC records that the leadership understood some of their limitations and took steps to obtain the very best sources of expertise available. Organization appears to have been only partially successful in this case at extending rationality and mitigating bias. Nicolson (1933), Headlam-Morley (1972), and Tardieu (1921) pointedly discuss many of the complications and difficulties introduced by the experts and by specialization. Further research is needed to understand the manner in which organization and expertise improved the settlement and the ways in which they may have failed.

References

- Babcock, Linda, George Loewenstein, Samuel Issacharoff, & Colin Camerer. 1995. "Biased Judgments of Fairness in Bargaining," American Economic Review, 85: 1337-1343.
- Baruch, Bernard M. 1920. The Making of the Reparation and Economic Sections of the Treaty. London: Harper and Brothers.
- Baynes, Norman H. 1969. The Speeches of Adolf Hitler, April 1922-August 1939, volume 1. New York: Howard Fertig.
- Bazerman, Max H., Jared R. Curhan, Don A. Moore, and Kathleen L. Valley. 2000. "Negotiation," Annual Review of Psychology 51: 279-314.
- Boemeke, Manfred F., Gerald D. Feldman, and Elisabeth Glaser. 1998. The Treaty of Versailles: A Reassessment after 75 Years. New York: Cambridge University Press.
- Bottom, William P. 2002. "Wilson and Lloyd George: Can the Principled Approach Tame the Hard Positional Bargainer?" Working Paper.
- Bottom, William P., & Paul W. Paese. 1999. "The Asymmetric Cost of Judgment Errors in Distributive Bargaining." Group Decision and Negotiation, 8, 349-364.
- Bottom, William P., & Paul W. Paese. 1997. "False Consensus, Stereotypic Cues, and The Perception of Integrative Potential in Negotiation," Journal of Applied Social Psychology, 27, 1919-1940.
- Bottom, William P., & Amy Studt. 1993. "Framing Effects and the Distributive Aspect Of Integrative Bargaining," Organizational Behavior and Human Decision Processes, 56, 459-474.

- Bottom, William P. 1990. "Adaptive Reference Points in Integrative Bargaining." In K. Borcharding, O.I. Larichev, and D.M. Messick (Eds.) Contemporary Issues in Decision Making. Amsterdam: Elsevier Science Press.
- Burnett, Philip M. 1940. Reparation at the Paris Peace Conference. New York: Columbia University Press.
- Camerer, Colin F., & Robin M. Hogarth. 1999. "The Effects of Financial Incentives in Experiments: A Review and Capital-Labour-Production Framework," Journal of Risk and Uncertainty, 19: 7-42.
- Camerer, Colin. 1997. "Individual Decision Making," In J. Kagel and A. Roth (eds.), The Handbook of Experimental Economics. Princeton, NJ: Princeton University Press.
- Camerer, Colin F., Linda Babcock, George Loewenstein & Richard Thaler. 1997. "Labor Supply of New York City Cab Drivers: One Day at a Time," Quarterly Journal of Economics, 112: 407-441
- Christensen-Szalanski, Jay J. J. & James B. Bushyhead. 1981. "Physicians' Use of Probabilistic Information in a Real Clinical Setting," Journal of Experimental Psychology: Human Perception and Performance. 7: 928-935.
- Clemenceau, Georges. 1930. Grandeur and Misery of Victory. New York: Harcourt Brace.
- Clodfelter, Michael. 1992. Warfare and Armed Conflicts: A Statistical Reference to Casualty and Other Figures, 1618-1991. London: McFarland & Company.
- De Dreu, Carsten K.W., Sander L. Koole, & Wolfgang Steinel. 2000. "Unfixing the Fixed Pie: A Motivated Information-Processing Approach to Integrative Negotiation," Journal of Personality and Social Psychology, 76: 975-987.

De Dreu, Carsten K. W., Peter J. Carnevale, Ben J.M. Emans, & Evert van de Vliert.

1995. "Effects of Gain-loss Frames in Negotiation: Loss Aversion, Mismatching, and Frame Adoption," Organizational Behavior and Human Decision Processes, 60, 90-107.

Dulles, John F. 1940. "Foreword", In P.M. Burnett, Reparation at the Paris Peace Conference, Vol. 1. New York: Columbia University Press.

Eliashberg, Jehoshua, Gary L. Lillien, & Nam Kim. 1995. "Searching for Generalizations in Business Marketing Negotiations," Marketing Science, 14, G47-G60.

Ferguson, Niall. 1996. "Constraints and Room for Manoeuvre in the German Inflation of the Early 1920's," Economic History Review, XLIX: 635-666.

Fisher, Roger, Andrea K. Schneider, Elizabeth Borgwardt, & Brian Ganson. 1997. Coping with International Conflict. Upper Saddle River, NJ: Prentice Hall.

Fisher, Roger, & William Ury. 1981. Getting to Yes. New York: Penguin Books.

Fleury, Antoine. 1998. "The League of Nations: Toward a New Appreciation of its History," In W. Boemeke, G. D. Feldman, and E. Glaser, (eds), The Treaty of Versailles: A Reassessment After 75 Years. Washington DC: German Historical Institute.

Friedman, Milton. 1953. Essays in Positive Economics. Chicago: University of Chicago Press.

Friedman, Milton, & Anna J. Schwartz, (1963), A Monetary History of the United States, 1867-1960. Princeton: Princeton University Press.

Gelfand, Lawrence E. 1963. The Inquiry. New Haven, CT: Yale University Press.

Hayward, Matthew L.A. & Donald C. Hambrick. 1997. "Explaining the Premiums Paid for Large Acquisitions: Evidence of CEO Hubris," Administrative Science

- Quarterly, 42: 103-127.
- Headlam-Morley, Sir James. 1972. Memoirs of the Peace Conference. London: Methuen & Co.
- House, Edward M. 1921. What Really Happened at Paris. New York: Scribner.
- Jonsson, Christer. 1991. "Cognitive Theory," In V. A. Kremenyuk (ed.), International Negotiation. San Francisco: Jossey Bass, 229-243.
- Kahneman, Daniel, & Amos Tversky. 1979. "Prospect Theory: An Analysis of Decisions Under Risk," Econometrica, 47: 263-291.
- Kahneman, Daniel, & Amos Tversky. 1972. "Subjective Probability: A Judgment of Representativeness," Cognitive Psychology, 3: 430-454.
- Katz, Daniel, & Kenneth W. Braly. 1933. "Racial Prejudice and Racial Stereotypes," Journal of Abnormal and Social Psychology, 30, 175-193.
- Kennan, George F. 1996. At a Century's Ending: Reflections, 1982-1995. New York.
- Kershaw, Ian. 1998. Hitler 1889-1936: Hubris. New York: Norton.
- Keynes, John M. 1922. A Revision of the Treaty. New York: Harcourt Brace.
- Keynes, John M. 1920. The Economic Consequences of the Peace. London: Macmillan.
- Kissinger, Henry. 1994. Diplomacy. New York: Simon & Schuster.
- Knock, Thomas J. 1998. "Wilsonian Concepts and International Realities at the End of the War," In M. F. Boemeke, G.D. Feldman, & E. Glaser (eds.), The Treaty of Versailles: A Reassessment After 75 Years. Cambridge: Cambridge University Press.

- Kuznets, Simon. 1946. National Product since 1869. New York: National Bureau of Economic Research.
- Lamont, Thomas J. 1921. "Reparations," In E.M House and C. Seymour (eds.), "What Really Happened at Paris," New York: Macmillan.
- Lentin, Antony. 2001. Lloyd George and the Lost Peace: From Versailles to Hitler, 1919-1940. Hampshire: Palgrave.
- Levy, Jack S. 1997. "Prospect Theory, Rational Choice, and International Relations," International Studies Quarterly, 41: 87-112.
- Link, Arthur S. (Ed.).1966-1994. The Papers of Woodrow Wilson. Princeton NJ: Princeton University Press.
- Lippmann, Walter. 1922. Public Opinion. New York: Macmillan.
- Lloyd George, David. 1938. Memoirs of the Peace Conference, volume 1. New Haven, CT: Yale University Press.
- Lucas, Robert E., Jr. 1986. "Adaptive Behavior and Economic Theory," Journal of Business, 59: S401-S426.
- Macrae, C. Neil & Galen V. Bodenhausen. 2000. "Social Cognition: Thinking Categorically About Others," Annual Review of Psychology, 51, 93-120
- Mantoux, Paul. 1992. Deliberations of the Council of Four. Princeton NJ: Princeton University Press.
- McNamara, Robert S., & James G. Blight. 2001. Wilson's Ghost. New York: PublicAffairs.
- Mommsen, Wolfgang J. 1998. "Max Weber and the Peace Treaty of Versailles," in M. F. Boemeke, G.D. Feldman, and E. Glaser (eds.), The Treaty of Versailles: A

- Reassessment after 75 Years. Cambridge: Cambridge University Press.
- Nash, John F. 1953. "Two Person Cooperative Games," Econometrica, 21, 128-140.
- Nicolson, Harold. 1933. Peacemaking 1919. London: Constable and Co.
- Northcraft, Gregory B., & Margaret A. Neale. 1987. "Experts, Amateurs, and Real Estate: An Anchoring and Adjustment Perspective on Property Pricing Decisions." Organizational Behavior and Human Decision Processes, 39: 84-97.
- O'Neill, Barry. 2001. "Risk Aversion in International Relations Theory," International Studies Quarterly, 45: 617-640.
- Osborne, Martin J., & Ariel Rubinstein. 1990. Bargaining and Markets. San Diego: Academic Press.
- Pillutla, Madan, & J. Keith Murnighan. 1996. "Unfairness, Anger, and Spite: Emotional Rejections of Ultimatum Offers". Organizational Behavior and Human Decision Processes, 68: 208-224.
- Pogarsky, Gregory, & Linda Babcock. 2001. "Damage Caps, Motivated Anchoring, and Bargaining Impasse," Journal of Legal Studies, 30: 143-159.
- Roll, Richard. 1986. "The Hubris Hypothesis of Corporate Takeovers," Journal of Business, 59: 197-216.
- Sargeant, Thomas. 1982. "The Ends of Four Big Inflations," In R. E. Hall (ed.), Inflation: Consequences and Cures. Chicago: University of Chicago Press.
- Schelling, Thomas. 1960. The Strategy of Conflict. Cambridge, MA: Cambridge University Press.
- Schuker, Stephen A. 1988. American "Reparations" to Germany, 1919-1933: Implications for the Third World Debt Crisis. Princeton NJ: Princeton University Press.

- Seymour, Charles. 1928. The Intimate Papers of Colonel House: The Ending of the War. Boston: Houghton Mifflin.
- Simon, Herbert A. 1947. Administrative Behavior. New York: Macmillan.
- Tardieu, Andre. 1921. The Truth About the Treaty. Indianapolis: Bobbs Merrill.
- Temperley, Harold W.V. 1924. A History of the Peace Conference of Paris. London: Frowde, Hodder, & Stoughton.
- Thaler, Richard H., & William T. Ziemba. 1988. "Anomalies - Parimutuel Betting Markets: Racetracks and Lotteries," Journal of Economic Perspectives, 2: 161-174.
- Trachtenberg, Marc. 1980. Reparation in World Politics. New York: Columbia University Press.
- The Treaties of Peace, 1919-23: Versailles, St. Germain, Trianon. 1924. New York: Carnegie Endowment for International Peace.
- Tversky, Amos, & Daniel Kahneman. 1974. "Judgment Under Uncertainty: Heuristics and Biases," Science, 185: 1124-1131.
- Weber, Elke U., & Richard A. Milliman. 1997. "Perceived Risk Attitudes: Relating Risk Perceptions to Risky Choice," Management Science, 43: 123-144.
- Webb, Steven B. 1989. Hyperinflation and Stabilization in Weimar Germany. New York: Oxford University Press.
- Weinstein, Edwin A. 1970. "Woodrow Wilson's Neurological Illness," Journal of American History, 57: 324-351.
- Williamson, Oliver E. 1985. The Economic Institutions of Capitalism. New York: Free Press.
- Yates, J. Frank, Ying Zhu, David L. Ronis, Deng-Feng Wang, Hiromi Shinotsuka, & Masanao Toda. 1989. "Probability Judgment Accuracy: China, Japan, and the

United States,” Organizational Behavior and Human Decision Processes, 43: 145-171.

Zartman, I. William. 1994. “Two’s Company and More’s a Crowd: The Complexities of Multilateral Negotiation,” In I. W. Zartman (ed.), International Multilateral Negotiation. San Francisco, CA: Jossey Bass, 1-10.

Zeckhauser, Richard. 1986. “Behavioral versus Rational Economics: What You See is What You Conquer,” Journal of Business, 59: S435-S450.

Table 1.

Delegates from the “Great Powers” at the Paris Peace Conference. (Source: Temperley, 1924).

Delegate						
	1st	2nd	3rd	4 th	5th	6 th
<i>(A) Plenipotentiaries</i>						
France	G. Clemenceau	S. Pichon	L-L. Klotz	A. Tardieu	J. Cambon	Marshal Foch
Great Britain ¹	D. Lloyd George	A.J. Balfour	A. Bonar Law	G. N. Barnes	Visc. Milner	W. Churchill
Italy	V. Orlando	S. Sonnino	G. F. S. Raggi	A. Salandra	S. Barzilai	
Japan	K. Saionji	M. Nobuaki	C. Sutemi	K. Matsui	H. Ijuin	
USA	W. Wilson	R. Lansing	H. White	E.M. House	Gen. Bliss	

(B) Expert advisors at the PPC and in the German Delegation at Versailles.

Advisor	Delegation	Occupation	Prime Issue
Baruch, Bernard	USA	Financier	Reparations
Cunliffe, Walter	Great Britain	Banker	Reparations
Davis, Norman	USA	Financier	Reparations
Dulles, John Foster	USA	Lawyer	Reparations
Headlam-Morley, James	Great Britain	Diplomat	Borders
Hoover, Herbert	USA	Industrialist	Food Relief
Keynes, John Maynard	Great Britain	Economist	Reparations
Lamont, Thomas	USA	Banker	Reparations
Lippmann, Walter	USA	Journalist	League of Nations
Loucheur, Louis	France	Financier	Reparations
Melchior, Carl	Germany	Banker	Reparations
Nicolson, Harold	Great Britain	Diplomat	Borders
Sumner, John	Great Britain	Judge	Reparations
Warburg, Max	Germany	Banker	Reparations
Weber, Max	Germany	Sociologist	War Guilt

¹Lloyd George successfully negotiated to add additional representatives from the Dominions of the British Empire including Australia, Canada, India, Newfoundland, New Zealand, and South Africa. In practice they functioned as additional British delegates but are here classed as “small power” delegates to simplify the presentation.