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PAPER APPROVAL

The abstract and paper of Tarah M	Iarie Wheeler for the Master of Science in Political
Science were presented	, and accepted by the committee and the
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ABSTRACT

An abstract of the paper of Tarah Marie	Wheeler for the Master of Science in Political
Science presented	

Title: Prospect Theory and the Cyprus Conflict: Analyzing Decisionmaking in the Turkish Cypriot President.

Rauf R. Denktash, the Turkish Cypriot president and leader of the Turkish Republic of Northern Cyprus, has made many decisions not to negotiate with his Greek Cypriot counterpart for peace and reunification on the island of Cyprus.

Traditional rational choice theories do not explain his willingness to sacrifice political power for his policy goals in risky choices. Prospect theory, a cognitive behavioral theory of decisionmaking, may help to explain why Denktash makes those risky choices by showing that decisionmakers who feel themselves to be in the domain of losses will make risky choices to gain their reference point, the location at which they feel themselves to switch from the realm of losses to that of gains.

Denktash's negotiating style reveals that he feels himself to be in the realm of losses, meaning that under the precepts of prospect theory, he is empirically likely to make risky decisions. The historical overview of Denktash's negotiations with the Greek Cypriots shows that Denktash continually makes decisions likely to reduce the very power by which he tries to achieve his policy goals.

PROSPECT THEORY AND THE CYPRUS CONFLICT: ANALYZING DECISIONMAKING IN THE TURKISH CYPRIOT PRESIDENT

by

TARAH MARIE WHEELER

A paper submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE in POLITICAL SCIENCE

Portland State University 2004

To Marvdad

From start to finish This would not have been possible without you.

Acknowledgements

I am profoundly indebted to my mentor, advisor, and committee chair Professor Birol A. Yeşilada for his invaluable aid on this project, from inception to conference paper to completed thesis. Not only has he been a marvelous resource in his acute and encompassing knowledge of the Cyprus conflict, but also extraordinarily adept at helping me to clarify my meaning and purpose.

Professor David T. Kinsella has tirelessly answered questions about form and content, as well as having been a treasured sounding board for the development of my main arguments and their objectives. His penetrating questions, advice, and scholarly resources have been given unstintingly to an appreciative recipient.

I have also had the honor of discussing the Cyprus conflict and Rauf Denktash with Professor Harry Anastasiou, whose compassionate, yet objective recounting of the Greek Cypriot viewpoint has given me an indispensable understanding of the Greek Cypriot leaders that Denktash has faced in negotiations. The friendship between and collaborative work of Dr. Anastasiou, a Greek Cypriot, and my mentor Dr. Yeşilada, a Turkish Cypriot, provides for me a more powerful inspiration than they know, and a desire to add my humble voice to the calls for peace on the island of Cyprus.

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Introduction¹

Is there any hope for the future in the myriad of theories concerning political behavior for an explanation of the poor, strange, and seemingly erratic decisions politicians make on behalf of their communities and themselves? What happens when a politician makes a decision that does not appear to be in her best interest? Traditional political and economic theories of decisionmaking do not account for the inconsistent decisions made by leaders who do not seem to calculate their own interest in readily predictable fashions.

When political decisionmakers control the outcome of vicious internecine conflict, their cognitive processes become much more than a matter of academic interest; these processes are a life-and-death affair for the people trapped within the struggle. On the island of Cyprus, conflict between the Greek and Turkish ethnicities has been simmering for centuries, and has come to a boil in the last forty years. Rauf R. Denktash, the leader of the Turkish Cypriot community, has blocked international and local attempts at peacemaking time and time again, presumably to his detriment and the detriment of his community. How can his actions be evaluated so as to provide a meaningful depiction of leadership decisionmaking under conditions of risk and crisis; more importantly, how can his actions give us the potential to understand other politicians in similar situations?

¹ Portions of this paper were presented at the 2004 annual meeting of the International Studies Association in Montreal.

Why study Cyprus?

The island of Cyprus has been divided since December 1963, according to international reckoning. In truth, the current violent conflict between the Turkish and Greek ethnic populations began in the 1950s with rival terrorist organizations.

For millennia, the strategic location of Cyprus in the Eastern Mediterranean just south of the Anatolian peninsula has made it a prize for conquerors from the Neolithic Age to today. The island was once a Byzantine possession; its population was primarily Greek in ethnicity and Orthodox in religion. Due to its crucial location for Mediterranean trade, Cyprus became part of the maritime Venetian Empire in the fifteenth century. In 1570-1571, the island was conquered by the Ottomans, who then engaged in a form of structured colonization of the island. They rewarded former soldiers for settling in Cyprus with land grants, and moved tradesmen and their families to the island from Anatolia by imperial decree. Interestingly, it seems to have been the importation of ethnic Turks that gave cohesiveness to the Greek Orthodox population of the island, especially after they had been subjected to Roman Catholicism under the Venetian Empire (Volkan & Itzkowitz, 1994).

The Greek Revolution of 1821 caused concern to the Ottomans, who feared a similar revolt on Cyprus, but the execution of Archbishop Kyprianos of the Cypriot Greek Orthodox church as well as other priests and laypersons *appeared* to have quelled any Greek resistance on the island. Earlier, the Turkish Cypriots had also staged a rebellion that was put down by the Ottomans. In actuality, it was the nineteenth century that first saw the appearance of the idea of *enosis* (union) with Greece spring up among the Greek Cypriots.

After the Russo-Turkish War of 1877-1878, the Treaty of San Stefano divested the Ottoman Empire of the Dardanelles. The strategic location of this newly Russian possession troubled the British Empire. Needing similarly strategic positioning in the Mediterranean to defend their interests in the face of Imperial Russian power, the British engaged in secret negotiations with the Ottoman sultan to "lease" the island of Cyprus—a face-saving tactic for the sultan who could then claim not to have surrendered Imperial territory—to be administered by a British colonial government (Volkan & Itzkowitz, 1994). The island was still nominally Ottoman territory until the beginning of World War I, at which point the British annexed it, and Cyprus became a Crown Colony of the British Empire. After World War II, the liberalization of the British administration allowed for more political expression, which among the Greek Cypriots led to renewed demands for *enosis* with Greece. Occasional attacks on the Turkish Cypriot community by a militant Greek minority led to problematic relations between Greece and Turkey during and after 1955 (Shaw, 1977). Clashes between Greek EOKA (the National Organization of Cypriot Fighters—Ethniki Organosis Kyrion Agoniston) and Turkish TMT (Turkish Resistance Organization—Türk Mukavemet Teşkilatı) from 1955-1958 resulted in hundreds of deaths on both sides. On August 16th, 1960, the Cyprus Treaty of Guarantee between Cyprus, Greece, Turkey, and the United Kingdom guaranteed the safety, integrity, constitutional order, and sovereignty of Cyprus; the treaty was based on Article 21 of the 1959 Zürich Agreement and was intended to halt the violence and provide for an independent Republic of Cyprus. In actuality, Article III of the treaty later provided the legal basis for Turkish military intervention (Zürcher, 1997).

In 1960, the compromise state of the Republic of Cyprus came into being, with Archbishop Makarios, a Greek Cypriot, as its first president. The 1960 constitution, drafted by the Joint Constitutional Commission in fulfillment of the terms of the London Agreement of 1959, specified power-sharing arrangements between the Greek and Turkish ethnicities. The intention to avoid *enosis* or *taksim*, the Turkish nationalist idea of partition of the island, led to the creation of this independent country; the ethnic conflict that was at the root of the need to compromise was not, however, addressed effectively. In 1963, Archbishop Makarios proposed 13 amendments to the Cypriot constitution that would, in effect, divest the Turkish minority of their rights and protections² (Volkan & Itzkowitz, 1994). The provision for a consociational democracy in the 1960 constitution was based on the idea that the minority could, through a series of checks and balances, avoid being tyrannized by the majority through a "deliberate joint effort by the elites to stabilize the system" (Lijphart, 1969:213). Makarios was attempting to change the nature of this Cypriot state to a unitary republic. The fearful reaction this caused among the Turkish Cypriots led to the outbreak of the current round of violence on December 21st, 1963, in which two Turks were killed and five wounded (Volkan & Itzkowitz, 1994:140).

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² One particular amendment, the 5th, expressed Makarios' desire to remove the provision in the House of Representatives for the passage of legislation only when approved by a majority of each ethnicity; in a body with 35 Greek members and 15 Turkish members, the Turkish Cypriots had been able to block legislation from passing with only eight votes. Makarios' contention was that this capacity to block legislation on the part of the Turkish Cypriots reduced legislative efficiency; in reality, the 5th proposed amendment would have declawed the Turkish minority. The 10th proposed amendment would have increased the ratio of Greek to Turkish members of the police and gendarmerie from the 70/30% split provided for in the constitution to one based on the actual percentage of each ethnic population—more like 82/18%. The 12th proposed amendment would have changed the Public Service Commission's decisionmaking process to one of simple majority; the Greeks had a majority in that body and would have had the power to shut the Turkish Cypriots out of the decision process.

By the 23rd of December, Nicosia, the capital city of Cyprus, was an interethnic battleground.

In March of 1964, the United Nations authorized a peacekeeping force on the island; the United Nations Peacekeeping Force in Cyprus [UNFICYP] is the longest running peacekeeping operation in the history of the UN. Over the next ten years from 1964-1974, Turkish Cypriots found themselves living in prison-like enclaves on the island; approximately 18% of the total Cypriot population lived on 3% of Cypriot territory. The Turkish Cypriots regained some freedom of movement in 1968 after the reelection of Makarios due to his realization that *enosis* was unrealistic; they were, however, still treated as third-class citizens. A Greek military coup had taken place in 1967; the authoritarian government had again encouraged Greek Cypriot hopes for *enosis*. The rise of militant nationalist terrorist group EOKA-B, led by Greek Cypriot Nikos Sampson, and his elevation to the presidency of the Republic of Cyprus in 1974 caused terror in the Turkish Cypriot minority; Sampson had been photographed several times with a gun in his hand and his foot on a fallen Turk, much as a hunter would be photographed with his game (Volkan & Itzkowitz, 1994).

On July 20th, 1974, Turkey effectively invaded Cyprus, using the previously mentioned legal justification found in the Treaty of Guarantee. After establishing a beachhead at Kyrenia in the north, the Turkish military occupied approximately 37% of the northern part of the island in a two-part operation, the second part of which was delayed until early August and completed by August 16th. This caused a massive refugee crisis; some 160,000 Greek Cypriots fled south, about 65,000 Turkish

Cypriots voluntarily escaped to the north.³ The Green Line created by the Turkish military intervention is now the UN buffer zone; this strip of land runs through the middle of the island from west to east, and splits Nicosia, the last divided capital city in the world. Thirty years ago the Turkish Cypriots, as they see it, were saved by the Turkish military from the tremendous danger posed towards them by hard-line nationalists on the Greek side. For the Turkish Cypriots, the Turkish military intervention of 1974 was the solution to the problem, not, as in the Greek Cypriot experience, a traumatic violation of national sovereignty and territory.

On February 13th, 1975, the Turkish Cypriot administration under the leadership of Denktash declared the 'Turkish Federated State of Cyprus,' (Denktash, 1988:80) and on November 15th, 1983, Denktash announced the creation of the Turkish Republic of Northern Cyprus (TRNC or KKTC—*Kuzey Kibris Türk Cumhuriyeti*), a choice he justified by saying that "public opinion both in Turkey and Cyprus was ready for a declaration of statehood" (Denktash, 1988:122). In the intervening years, negotiations to reunify the island have run aground time and time on the rocks of mutual suspicion, ethnic hatreds, remembered evils suffered at the hands of the opposing side, and poorly structured agreements that do not solve the main issues of foreign military occupation, right-of-return, property ownership, and freedom of movement. The conflict has become entrenched in the consciousness of both sides, not least due to the nature of politics on the island, which sees the same nationalist leaders elected time and time again to power in both communities. On the

³ This is the Greek Cypriot tally of the number of refugees, though the Turkish Cypriots believe this number needs reexamining due to the number of Greek Cypriots living on Turkish Cypriot property pre-1974.

Greek Cypriot side, politicians like Archbishop Makarios, Spyros Kyprianou, Glafcos Clerides, and Tassos Papadopoulos have all been involved over lengthy periods of time in leading the Greek Cypriots. In the Turkish Cypriot community, one politician, Rauf R. Denktash⁴, has overshadowed all others due to his length of tenure in office—roughly comparable to Fidel Castro's period in office—and his obstinate insistence on the rights of the Turkish Cypriot community.

Denktash is famous for his stubbornness; 'intransigent' is typically the word used to describe the man. His influence over the Turkish Cypriot community in the past has been profound, and over the last 30 years has taken on an avuncular aspect. His constituency on the island has been extremely loyal; older Turkish Cypriots know they can depend upon him neither to change his stance on Cypriot issues nor to compromise...at all. Unfortunately, Denktash's obdurate attitude now protects the Turkish Cypriots less than it obstructs them from obtaining a solution to their predicament as an internationally isolated community with a GDP per capita of less than 40% of their Greek Cypriot counterparts.

As a politician with serious staying power, and the past ability to sway a large portion of the Turkish Cypriots to his views, Denktash's decisionmaking processes are key to understanding the length and structure of the Cyprus conflict. If a greater understanding of the reasoning behind his choices as the Turkish Cypriot leader can be acquired, the decisionmaking processes of other leaders embroiled in long-term ethnic conflicts could become more transparent. The value of studying a particular leader in this case, though in reality only one man, can be found in the degree of influence he

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⁴ This is the common Anglicization of Denktash's name, though it is also spelled 'Rauf R. Denktaş'.

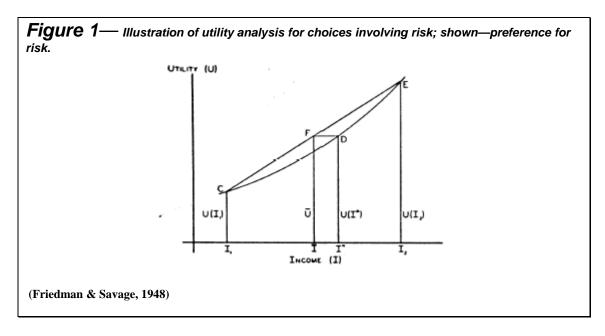
has held with his constituency. One person actually can change the course of violent conflict; though few have been placed so firmly in a position to do so, enough cases of leadership in ethnically embattled countries exist around the world to give consequence to a study of just this one man.

Explanations of the Cyprus conflict have ranged from psychological explanations of the nature of the Greek/Turkish conflict (Volkan & Itzkowitz, 1994), interdisciplinary approaches based on a socio-historical premise of nationalism (Calotychos, 1998), to purely realist descriptions of the incompatible nature of power sharing on the island due to the strategic interests of the mother countries. The influence of the Turkish military cannot be underestimated in this case; Turkey possesses the sixth-largest military in the world, and guards the southern flank of NATO; Turkish military capabilities far outstrip those of Greece. The strategic position of Cyprus plays a role in realist explanations of the larger Greek/Turkish conflict; the three main issues facing the mother countries in the resolution of their conflict are Cyprus, Aegean territorial issues (including continental shelf and airspace quandaries), and the respective Greek and Turkish ethnic minorities found in each other's sovereign territory. Though it is likely that Greece and Turkey will find themselves fellow member states of the European Union sometime in the next fifteen years, causing the Aegean and minority issues to fade into insignificance, Cyprus has been set up as a stumbling block for Turkey in its quest to join the EU. Though a remarkable rapprochement between Greece and Turkey has been observed of late, an unresolved Cyprus conflict entrenches a Greek/Turkish flashpoint, dramatically increasing the likelihood that the two mother countries—one an EU member state, the other about to be given a date for accession talks—could be dragged back into ethnic tension.

Single, powerful politicians in control of rigidly hierarchical political parties sway a substantial portion of the electorate on both sides of the island. Hence, an explanation of individual choice under conditions of risk in political leaders is needed to fully understand the Cyprus problem at the individual level of analysis.

Literature Review

Rational choice, a compelling and influential theory of decision, has migrated from economics to political economy to political science, and has been the foundation for much of the current work in individual decisionmaking. For individuals capable of maximizing their self-interest, choices among alternative options were prioritized in terms of maximization of utility, or the gains to the individual making the choice. In addition, the value attached to a particular choice was not dependent upon the value attached to other choices; the removal and addition of choices did not affect the value of others (Tversky & Simonson, 1993). Choice under risk was then explained by an extension of rational choice theory called expected utility theory. This conception of choice under risk involved a similar perfect calculation of the costs and benefits by an individual decisionmaker, but added the idea of a probability distribution function to weight the choices based on their likelihood of occurrence (Von Neumann & Morgenstern, 1944; Friedman & Savage, 1948). The assumption is that individual preferences can be represented by a real-valued function over a choice set (Machina, 1987). Expected utility theory also treats all persons as if they were risk averse; people are assumed to prefer a certain prospect (x) to any risky prospect with expected value (x). This is shown by the concavity of the expected utility function in fig. 1.



The graph shows the concave utility function of a risk averse decisionmaker. The segment FD represents the distance between the certain prospect (x) and the risky prospect with expected value (x); the concavity of the function shows the preference of the risk averse decisionmaker for certainty. Under the tenets of expected utility theory, a risk-neutral individual does not differentiate between a certain prospect (x) and a risky prospect with expected value (x); they *equate* the two (O'Neill, 2001). In figure 1, the straight line represents the equivalence of certain (x) and risky prospect with expected value (x) for a risk neutral decisionmaker.

When using expected utility theory to describe decisionmaking situations at the international level, theorists have used the unitary state actor assumption, basing it on the aggregation of policymaker or elite interests (Bueno De Mesquita, 1981; Organski & Kugler, 1980). In answer to the empirical difficulty of aggregating individual interests due to differing individual treatment of risk, other theorists have proposed alterations or additions to 'fix' certain paradoxes in expected utility theory, usually by

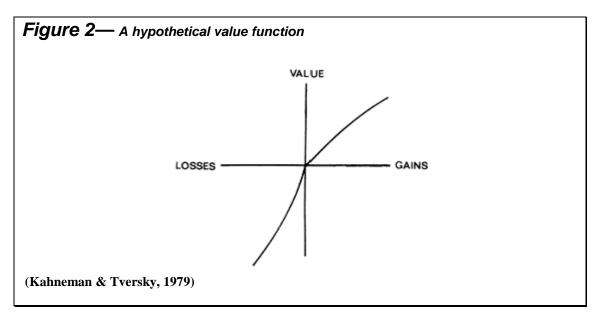
tinkering with ever more complicated mathematical permutations of the utility function, instead of changing the fundamental assumptions behind the theory. Without changing the basic assumption that all actors are risk-averse, Becker and Sarin (1987) believe that allowing utility to depend on lottery allows for more predictability due to human incapability to accurately determine the value of the choices presented; they add a family of parametric equations to expected utility to allow the utility function to vary right along with the lottery. ⁵ Bell (1982) theorized that individuals do not wish to appear to have made the wrong choices in retrospect, and creates a multiattribute utility function to "holistically" take monetary assets as well as "decision regret," or the concern over foregone assets, into account. To be fair, expected utility theory provided a good place to start; it involved a refutable hypothesis, and testing its implications was straightforward (Arrow, 1982:1).

Part of the problem with expected utility explanations of decision processes is that they assume that the starting place does not matter for a decisionmaker; only the absolute outcome is calculated in the value function (Tversky & Kahneman, 1991). In 1979, two cognitive-behavioral psychologists, Amos Tversky and Daniel Kahneman, proposed an alternate theory of decisionmaking under risk called prospect theory. They asserted that systematic violations of expected utility theory—the previously mentioned paradoxes—occurred and were not satisfactorily treated in the then-current literature on the subject. After years of research on cognitive biases and heuristics, they came to believe that several key assumptions about the perfect

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⁵ Allowing utility to depend on lottery does not involve a set of preferences valid over each lottery presented to the decisionmaker; instead, for each separate set of choices, the decisionmaker's preferences and hence utility function varies based on the options presented, though Becker and Sarin require that the condition of transitivity of preferences be satisfied.

rationality of decisionmakers under conditions of uncertainty were grounded on systematic errors (Tversky & Kahneman, 1974). They argued that individuals did not calculate risk perfectly among alternative choices, nor were they always risk averse; when individuals made choices under risk, they treated potential gains and losses differently (Kahneman & Tversky, 1979). Individuals are risk seeking in choices between negative prospects, and risk averse in choices between positive prospects; this tendency is shown by the characteristic s-shaped value function for prospect theory. This value function, seen in Figure 2, demonstrates a steeper function in the domain of losses as opposed to gains, showing that losses hurt more than gains please.



Under prospect theory, the carriers of value are gains and losses, meaning that choices are not evaluated for maximization of wealth, but for maximization of positive change in the reference point. Referring again to the value function graph, one can see that it is "(i) defined on deviations from the reference point; (ii) generally concave for gains and commonly convex for losses; [and] (iii) steeper for losses than for gains"

(Kahneman & Tversky, 1979:279). The key point to take away from this is that when decisionmakers perceive themselves to be operating in the domain of losses, they are empirically likely to be risk acceptant, and when in the domain of gains, they are empirically likely to be risk averse. The degree of their risk acceptance or risk aversion is determined by the weighting function; the combination of the weighting function and the value function determines the attitude of each individual towards a prospect. ⁶ In prospect theory, the decisionmakers do not choose based on a probability function calculated on actual likelihood of success (see fig. 1 again), but based on subjective probability calculated on the perception of success.

The Coase theorem, a foundational economic explanation of decisionmaking from the expected utility perspective, states that initial entitlements do not affect final allocations, and excepts only transaction costs (Tversky & Kahneman, 1991; Kahneman, Knetsch, & Thaler, 1990). Since prospect theory asserts that the reference point is key in determining the likely risk aversion or risk acceptance of a decisionmaker, meaning that initial entitlements actually do affect final allocations, when and how do decisionmakers find themselves in the realm of gains or losses? Reference-dependence responds by saying that the carriers of value are gains and losses defined relative to a reference point (Tversky & Kahneman, 1991). It is also the central assumption in the utilization of prospect theory to analyze risky choice, and is the key point at which prospect theory and expected utility differ⁷ (Levy, 1997).

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⁶ For further discussion of the technicalities and terms in prospect theory, see Tversky & Simonson, 1993; Schoemaker, 1990; and Thaler et al., 1997.

⁷ More complex agent-based models have been developed from the basics of expected utility theory that take strategic interaction and cognitive research into account. Though agent-based modeling is beyond the scope of this case study, it has important implications for the ability of political scientists to utilize

Expected utility maximizes over total assets, not changes from the starting point. Reference-dependence also must be calculated in terms of the location of a decisionmaker's reference point; this calculation must take instant endowment, or the endowment effect into account (Thaler, 1980; Knetsch, 1989; Tversky & Kahneman, 1991). The endowment effect is shown by the fact that people adjust far more quickly to gains than losses, as is shown by the value function; they tend to immediately assimilate a positive change to the status quo and show no desire to shift back to their previous reference point. On the other hand, people who have suffered a loss take time to assimilate their new position, and tend to experience bitterness and longing for what they still perceive as an acceptable status quo. This pattern of behavior, closely related to the endowment effect, is referred to as status quo bias, or the willingness to pay/willingness to accept measures of value, and has been rigorously empirically tested. An example of status quo bias in political decisionmaking is the way states treat territory lost or gained in war; new territory is instantly accepted as part of the country, but land lost is yearned and schemed after.⁹

The implications of the status quo bias and reference-dependence in this newly proposed theory are imperative for the purposes of analyzing a politician like

psychology and game theory in the same algorithm. For further explanation of this development in expected utility theory, see Kugler, Abdollahian, & Tammen, 2000 and Kugler, Yesilada, & Efird, 2003.

⁸ For further discussion of the status quo bias and empirical tests thereof, see Coursey, Hovis, & Schulze, 1987; Hogarth & Einhorn, 1990; Knetsch & Sinden, 1984; Knetsch & Sinden, 1987; Kahneman, Knetsch, & Thaler, 1990; Kahneman, Knetsch, & Thaler, 1991; and Tversky & Kahneman, 1991.

⁹ Many of the Balkan countries suffer from this continued clutching after a previous status quo. The struggle by Macedonia to regain parts of Thrace in order to create "Greater Macedonia" is one example; the Greek "Megali Idea" is another. Translated as the "Great Idea," it is a Greek nationalist concept calling for the reestablishment of the Byzantine Empire; it has led to conflict with Serbia and Bulgaria concerning territories lost in Macedonia as well as conflict with Turkey over Constantinople/Istanbul and western Anatolia, not to mention Cyprus.

Denktash; "a change of reference point alters the preference order for prospects. In particular, the present theory implies that *a negative translation of a choice problem, such as arises from incomplete adaptation to recent losses, increases risk seeking in some situations*" (Kahneman & Tversky, 1979:286-287, italics added).

The development of prospect theory has led to considerations of framing. The different ways in which a question is asked can lead to different answers depending upon the language used and the stakes involved; a decision frame consists of the language of the question and the individual personality of the decisionmaker (Tversky & Kahneman, 1981; Tversky & Kahneman, 1986; Quattrone & Tversky, 1988). The point being made by the authors is that invariance, a key assumption of expected utility theory that states that the same question should be answered the same way no matter what the language, is violated in practice. ¹⁰ The implications for political decisionmaking are found in the idea that a simple shift in the wording of an agreement can bring about a marked shift in the decisionmaker's perception of the desirability of that agreement.

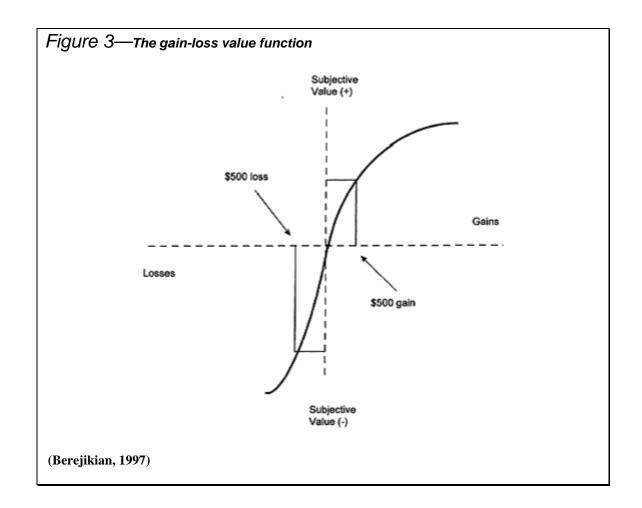
This is not to say that the decisionmaker is irrational; prospect theory is a cognitive-behavioral development of rational choice theory that takes more internal psychological processes into account. It is not a replacement for rational choice as a behavioral theory; rather, it is a means of calculating a more accurate utility function

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¹⁰ The authors give the example of a study about preferences in medical treatments that is key to understanding the way people think about problems; when participants in the study were asked to choose between surgery and radiation therapy as cancer treatments, phrasing the choice first as a choice between survival rates, then as a choice between mortality rates caused respondents to switch their answers. What the authors call an "inconsequential difference in formulation" (Tversky & Kahneman, 1986:S255) caused a staggering shift from risk aversion to risk acceptance based on the shift from a positive prospect to a negative prospect. Hence, "variations in the framing of decision problems produce systematic violations of invariance and dominance that cannot be defended on normative grounds." (Tversky & Kahneman, 1986:S256)

(Farkas, 1996). The function is for *prospective* utility, instead of *expected* utility. Individuals simply experience greater internal, emotional complexity in making decisions than rational choice theory accounts for (Loomes & Sugden, 1982).

Risk attitudes are the key to understanding of prospect theory; in particular, it is crucial to note that losses always loom larger than gains. Hence, the s-shaped value function is steeper in the domain of losses than it is in the domain of gains.



Examining figure 3, the subjective value of the loss of \$500 is shown by a larger enclosed space than the gain of \$500; this is brought about by the irregular shape of the prospect function. In a phenomenon known as preference-reversal, most people

would rather, for example, have an even chance of losing \$200 or nothing rather than a certain loss of \$100, as long as they are operating in the realm of losses (Grether & Plott, 1979; Machina, 1987; Quattrone & Tversky, 1988). The flip side of this is that most people would prefer a guaranteed gain of \$100 to an even chance of winning \$200 or nothing. The point is that preference-reversal "cannot be attributed to violations of the independence or the reduction axioms and therefore cannot be rationalized by a generalized (nonindependent) utility model" (Tversky, Slovic, & Kahneman, 1990: 214).

Theoretical and Descriptive Applications in International Relations

If such a convincing picture of an individual's treatment of gains and losses can be drawn so easily, the next question to ask is this: how does prospect theory apply to international relations? Has international relations literature used prospect theory to convincingly tell the story of political decisionmaking at the individual level?

Loss aversion and the status quo bias can be found in any politician's desire to avoid even a limited defeat; they are likely to be punished at the polls for so doing (Jervis in Farnham, 1994:24). Individual politicians are also concerned with the maintenance of their personal power; decisions to act forcefully and publicly towards enemies can be influenced by whether or not they find themselves in the realm of political losses and hence risk acceptant. In American politics, this is known as the "wag-the-dog" effect. On the national level, it is intuitive that "states seem to make greater efforts to preserve the status quo against a threatened loss than to improve their position by a comparable amount" (Levy, 1992:284). This may not always be negative; this tendency to defend the status quo and to be risk averse in the realm of gains probably contributes to stability in international politics (Levy, 1992). On the other hand, it is quite possible that a continuing tendency to want to return to one's reference point in a perceived zero-sum game like a bipolar relationship means that loss aversion could contribute to escalating military tactics in that relationship if both sides perceive themselves to be in a deteriorating situation and the other side to be in the realm of gains (Levy, 1992). One effect of the status quo bias is that "immediate

action is more likely to be perceived as a legitimate defense of the status quo than action which is delayed" (Levy, 1992:288-289). The example given by Levy is at the start of World War I, in which Austria-Hungary's delayed reaction to the Serbian assassination of Archduke Ferdinand caused Europe to adjust to the new status quo before Austria-Hungary reacted; this made *Austria-Hungary* the perceived violators of the status quo, not Serbia. Now recall that the Turkish invasion of the north of Cyprus was a two-part operation, the later half of which was delayed for several weeks. Part of the continuing international pressure for the Turkish military to leave northern Cyprus is based on the perception that a new status quo was established with the initial protective presence of the Turkish military on July 20th, 1974 (meaning that the presence of the Turkish military was at least internationally understood as necessary for the protection of the Turkish Cypriots); since the Turks began a new military operation to occupy the north weeks later, Turkey was perceived as the violator of the status quo, instead of the Greek Cypriots—at least until 2004.

Prospect theory also has critical implications for deterrence theory. If adversaries perceive themselves to be in the realm of gains, they are contemplating how to improve their position; if in the realm of losses, they are attempting to prevent their position from deteriorating further (Levy, 1992). No one wants to see a dyad of nuclear-capable adversaries making risk-acceptant choices to remove themselves from the realm of losses! It is also necessary to acknowledge that losses, for each adversary, are not necessarily evaluated in the context of the international relationship. Indeed, the previously mentioned wag-the-dog effect indicates that international adversaries may find themselves in the position of domestic political losses, from

which it may be inferred that the international relationship will suffer from the attempts by each state to refocus attention away from domestic woes through forceful and risk-acceptant moves in the dyadic relationship. Worse, "Credible threats might generate a losses frame for the target state and thereby push it into risky behavior. The target of a threat might then risk breaking off negotiations when the threatening state was simply attempting to secure a better deal, or threats may induce the target to attack even if there is only a low probability of success" (Berejikian, 2002:172-173).

The Cuban missile crisis, as one of the most studied political events in history, has interesting implications in the body of empirical work done with prospect theory, especially in the area of deterrence theory. Haas (2001) finds that Kennedy and Khrushchev both made excessively risky, non-value maximizing choices in the escalation of the crisis, based on their reference points as concerns domestic and international gains and losses and on their calculation of estimated value attached to various options in the maintenance or resolution of the conflict. He also determines that the nonlinear response of both individuals to probabilities is consistent with the principles of prospect theory, and provides a counterfactual to the claims of expected utility theorists in this case. Finally, Haas determines that "Kennedy and Khrushchev switched from excessively risky to more value maximizing behavior at precisely the time that prospect theory predicts, that is, when their probability estimates approached (but did not necessarily reach) certainty" (Haas, 2001:266-267). His conclusion is that leaders who find themselves in the realm of losses are empirically far more likely to engage in extremely risk acceptant behavior, even when the stakes are as high as possible—in this case, nuclear warfare. Obviously, prospect theory has a great deal to say in this area of international politics; the downward spiral is the last place theorists should be complacent about loss aversion and risk acceptant behavior.

Most importantly in international relations, prospect theory must show how decisionmakers *typically* take disproportionate risks to avoid losses when in a disadvantaged situation and do not grasp with the same fervor chances to improve their situation when in the realm of gains. Remembering that the reference point for a decisionmaker defines the realm of gains and losses and that every empirical analysis of choice must locate every choice in relation to that reference point, decisionmakers should also empirically show themselves to be risk averse in the realm of gains. Importantly, choices for politicians rarely show themselves to be clear-cut; decisions frequently have both a positive and negative aspect as far as their potential outcomes, and this must also be taken into account when evaluating the sum value of a particular prospect to the decisionmaker.

How do these actors choose between competing mixed options? McDermott (1994) posits that Jimmy Carter's choice to undertake the mission to rescue the hostages in the 1979-1980 Iranian hostage crisis was just such a decision. McDermott believes that prospect theory in particular helps to illuminate this case, since more dominant theories have failed to do so. She mentions that structuralism would seem to indicate that it is highly unlikely that the United States, a superpower, would become embroiled in conflict with a minor power like Iran; yet in conflict they found themselves. In addition, once they found themselves in conflict, structuralism would imply that the US would be able to resolve the conflict easily through the use of its disproportionately larger power share. What then happened? McDermott believes

that Carter's framing process took domestic political and international military losses into account, and found that while the risk of a failed rescue mission was present, of all the options available to him a rescue mission also offered the only hope of domestic political gains should it succeed, as opposed to the smaller loss of doing nothing and enduring a perceived slow decline in popular opinion. This then means that Carter, struggling domestically and perceived as being intimidated internationally, found himself in the domain of losses and opted for the highly risk-acceptant choice of engaging in a rescue mission. In his case, it was the wrong decision—but only because it failed! "Prospect theory would predict that, in the domain of losses, Carter would opt for a risky gamble that might return the situation to the former status quo. Such a risky gamble is characterized by a situation where the probability of success is lower than that offered by other options, but the utility of the outcome is higher" (McDermott, 1994:88-89). Prospect theory then seems to explain Carter's choice better than any of the alternative theories of decision under risk. More than that, it appears to *predict* Carter's choice. Where expected utility theory treats decisionmakers as risk averse, "it is clear that Carter made a risk seeking choice. He had other choices that were both militarily less risky, like mining the harbors, or politically less risky, like seeking additional indirect diplomatic negotiating channels. However, he took the one gamble that offered a chance of recouping all the losses he had previously sustained to regain the former status quo... This finding is perfectly consistent with, and even predictable, based on prospect theory. Moreover, prospect theory provides insight which makes little sense from a structural perspective. Indeed,

no other theory would predict such risky behavior in a bad situation" (McDermott, 1994:98).

Finally, when a decisionmaker perceives the status quo as unsatisfactory, and has imagined a reference point that addresses all their needs for gains, there is a tendency to view anything less than the imagined reference point, called an expectation level, as being in the realm of losses (Levy, 1996). Frequently, decisionmakers frame their decisions as avoiding losses as opposed to obtaining gains, especially when negotiating on behalf of others (Bazerman, 1983; Neale & Bazerman, 1985). Hence, they are cognitively placed in the domain of losses, especially if they perceive themselves to be negotiating in a zero-sum game. Entire nations can feel this effect; my interest is only in the individual level of analysis in this case. Feelings of entitlement and denied opportunity on a national level provide another venue for prospect theory research in the aggregate, especially in the consideration of the framing of the public goods and commons dilemmas (Brewer & Kramer, 1986) or even framing foreign policy altogether (Berejikian, 1997). On an interpersonal level, being aware of the dynamic nature of negotiation and the likelihood that a loss-framed negotiator will be far less prone to making concessions can create a more realistic view of the potential outcomes of negotiation. This understanding "extends the fundamental postulate of Prospect Theory that losses loom larger than gains" (De Dreu et al., 1994).

In an examination of framing effects, Farnham (1994) finds that the different way in which Franklin D. Roosevelt framed the Munich negotiations to himself at the beginning and end of the crisis is reflective of empirical accuracy in the assumption of

reference points and framing effects in prospect theory. When discussing Roosevelt's change of heart in the middle of the crisis and his new determination to intervene on behalf of American interests, Farnham notes that "What is most striking about Roosevelt's reversal of preferences is that it seems to have been a consequence of a change in the way he represented the crisis to himself, or framed it, rather than a response to new information about its implications for the United States. Initially, Roosevelt believed that the European crisis, even should it end in war, did not represent an immediate threat to the United States. In mid-crisis, however, he apparently became convinced that it did pose such a threat, despite the fact that, from an American point of view, the objective situation was unaltered. Roosevelt had in fact come to regard an outcome of war as in some sense a loss for the United States and thus felt impelled to take action to avoid it" (Farnham, 1994:42). Regard the number of times Farnham uses subjective terms to discuss Roosevelt's state of mind: 'represented the crisis to himself'; 'believed'; 'apparently became convinced'; 'come to regard'; and 'felt impelled'. Five different ways of representing a subjective change in mentality in one paragraph brought about by *no* change in the objective situation for America; clearly, at least for Farnham, Roosevelt's changing perception of events deeply influences his internal decisionmaking processes. Roosevelt's shift from regarding American interests as being in the realm of gains to being in the realm of losses caused him to change his decision to keep the United States out of the Munich negotiations. Farnham finally notes that the development of prospect theory in the area of frame changes brought about by emotional crises would be an invaluable

addition to this body of work, especially as it seems to be thoroughly relevant when analyzing individual decisionmakers (Farnham, 1994:69).

Before launching into an application of prospect theory, some limitations must be considered. One of the major difficulties with applying prospect theory to real world cases comes from the highly controlled experiments used to empirically support the theory. Levy discusses the technical difficulty with the real-world application of prospect theory by saying that "in order to explain a choice in terms of prospect theory one would have to identify how the actor (1) defines the reference point, (2) identifies the available options, and assesses the (3) value and (4) probability of each outcome. The analyst would then have to (5) modify the subjective probabilities by an approximate probability-weighting function, and finally, (6) show that the resulting value of the preferred prospect or option exceeds the value of alternative prospects" (Levy, 1992:296). To remove all this uncertainty, the behavioral experiments done from which prospect theory has been inferred have been rigidly framed and controlled, adding a degree of uncertainty as to their empirical applicability in policymaking. 11 The problem is that decisionmaking in the real world rarely fits conveniently on a continuum of possible choices and outcomes like money or points in a game. 12

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¹¹ Tversky and Kahneman used football game point-spread predictions between Stanford and Berkeley graduate students as a case study for cumulative prospect theory. (Tversky & Kahneman, 1992)

¹² When tested empirically by Harless and Camerer (1994) over a large number of respondents, prospect theory tested poorly in comparison to the error rate for predictability in Machina's (1994) fanning-out theory, fanning in (these refer respectively to the tendency of indifference curves to become steeper and flatter), and expected utility theory. In fact, the authors found little reason to adopt any alternate explanation to expected utility; they believe that though all theories predicted outcomes better than random choices, each had systematic variation in the patterns they failed to predict. Unfortunately, what they tested in their large aggregate study was "an extremely simplified form of prospect theory which incorporate[d] several of its key features." (p. 1255) The authors treated the value function (or utility function over riskless amounts) as strictly concave for gains and convex for losses; they incorporated the weighting function; and "lotteries [were] ranked by the sum of their weighted outcome values." (p. 1255) However, two *major* components of prospect theory—framing effects and reference-

There is one metatheoretical test at which prospect theory performs poorly where expected utility theory performs well, and that is parsimony. Since prospect theory makes no normative claims (Tversky & Kahneman, 1986) it relies upon a larger set of assumptions—including the ill-defined and yet intuitive framing effect—than does expected utility, making expected utility more persuasive in the sense that fewer assumptions are more parsimonious. In a disclaimer, should prospect theory predict decision under risk substantially better than does expected utility theory, parsimony is not in and of itself valuable, nor should it be a criterion in evaluating between the two. If the goal is prediction, the real test ought to be success, not the particular competing elements of the theory.

In the final note on the application of prospect theory in the Cyprus case,
Levy's (1992) concerns on the ability of an analyst to properly estimate the reference
point, weighting functions, risk attitudes, and judge the actor's likely valuation of the
alternatives are here answered by in-depth literature on the Cyprus problem and the
available psychological opinions on Rauf Denktash. Though it is impossible to
provide an exact calculation of Denktash's value function, prospect theory can provide
a powerful explanation for this influential leader's cognitive processes, risk attitudes,
and his personal contribution to the perpetuation or solution of the Cyprus conflict.

dependence—are ignored in this test; these two concepts are vital to understanding the logic behind, not just the predictive power of, prospect theory. It is distinctly possible that the systematic variation in failure to predict respondent choices can be explained by a less-conveniently simplified version of prospect theory. Notably, the authors found that every theory they tested was rejected by a chi-squared test, meaning that every theory—including expected utility—suffered from the same problem of unexplained systematic variation. Hence, due to the extremely simplified nature of this empirical test of prospect theory and the lackluster performance of any other predictive theory of decision under risk, Harless and Camerer's experiments do not convincingly debunk prospect theory.

The value of prospect theory as an outline of the cognitive processes in decisionmaking at the individual and organizational level is clear; in addition, the *predictive* value of prospect theory has weighty implications. The case studies of Kennedy and Khrushchev, Roosevelt, and Carter are the applications that are most pertinent for the analysis of Denktash's decisionmaking, since they involve the real world application of the logic behind prospect theory; most specifically, that of framing, reference-dependence, status quo bias, risk attitudes, and loss aversion.

Analysis of Denktash's Negotiating Behavior

Levy (1997) discusses four key elements to the creation of a prospect theorybased analysis of a case: the framing of the reference point, the available options to the decisionmaker, their potential outcomes, and the values and probabilities associated with each. If Denktash's reference point revolves around his political success, then how to explain his willingness to alienate his electorate by obstructing negotiations? If his reference point revolves around his goal of eventual union with Turkey, how to explain his occasional willingness to restart negotiations? "How individual political leaders frame their reference point is highly subjective and difficult for the analyst to identify" (Levy, 1997:98). What value, precisely, is Denktash attempting to maximize? I posit a combination of the two, where Denktash uses his office to achieve his policy goals. Anagnoson (1989:110) looks at the American executive branch and discusses the constraints that both executive officials and elected representatives face in attempting to implement policy goals. "The assumption here instead is that both administrators and legislators are goal-seeking politicians, trying to achieve their goals in the context of organizations that they can partially fashion themselves and that are partially out of their control." The underlying implication is that politicians treat elections and their constituency as a potential stumbling block, and so must maximize their political success to achieve their policy goals. Though their constituency is the means by which politicians gain and hold office, their goals may not be the same as those of the electorate. If this is the case, Denktash must achieve continued electoral success in order to stay in office long enough to reach his

goal of union with Turkey. Since political success contributes in the most meaningful way to Denktash's capacity to achieve his expectation level, the two intimately interacting values must be viewed as inseparable for him in the location of the reference point.

Since the question I am attempting to answer concerns Denktash's willingness or lack thereof to negotiate with the Greek Cypriots concerning the reunification of the island, his options are either to negotiate or not for settlement.

For the TRNC, the outcome of Denktash's choice not to negotiate concerning reunification results in: blocking the reunification of the island; continued poor relations with the European Union; increased threat of military conflict (as well as other foreign policy issues) between Turkey and Greece; continued economic sanctions against the TRNC; and international isolation. For the TRNC, Denktash's choice to negotiate results in the potential reunification of Cyprus—from which come all other benefits, like: a potential upswing in relations between the EU and the TRNC; potential reduced conflict between Turkey and Greece; and dropping the economic sanctions and international isolation. ¹³

In 1968, fearing the irrepressible idea of *enosis*, the Turkish Cypriots held an election (the Greek Cypriots had already done so; Makarios won by a landslide) and Dr. Fazıl Küçük was chosen as the president of the Turkish administration with Denktash as the vice-president (Volkan & Itzkowitz, 1994:141). Denktash replaced him after forming the UBP (National Unity Party—*Ulusal Birlik Partisi*) in 1974, and has been reelected to the presidency ever since.

¹³ For the relevant period, 1999-2004, Denktash as the chief negotiator had the power to start and stop negotiations unilaterally.

Though it is dangerous and patently untrue to assume that Denktash makes all the decisions for northern Cyprus, his influence over community policy is pervasive enough that for the purposes of this study, they can be said to be so close as to make no difference. He does little to discourage the notion, as well. In his book, *The Cyprus Triangle*, Denktash phrases the announcement of decisions like the declaration of the Federated State in 1975 and the TRNC in 1983 as primarily his choice.

Under the endowment effect, the Turkish Cypriot community immediately adjusted to their gains after the Turkish invasion, and viewed Turkish military occupation of the north as the status quo; the Greek Cypriots have never adjusted to the loss, and wish to return to the old status quo, their reference point. To the Turkish Cypriots, the primary problem is not the division of the island; it is the state of profound (relative to the south) poverty and international isolation they are suffering. The historic situation of isolation the Turkish community found itself in was not ameliorated to any degree by the European Union regarding the Republic of Cyprus (nominally of the whole island; in reality a Greek Cypriot government) as the legitimate government of the island, with the Turks being regarded as an aberration to be negotiated around, and only with the permission of the Greek Cypriot government of the south (Dodd, 1999:107).

Though over the last 30 years his position has generally reflected the will of the Turkish Cypriots, Denktash's reference point does not match with the current reference point of the Turkish Cypriots (EU membership and international recognition). As previously mentioned, Denktash is a stubborn man, whose attitude at times seems irrational. His refusal to bend to the voice of Turkish Cypriot civil

society in the massive peace rallies of December 2002/January 2003 is the impetus behind this case study, and appears to be out of line with the assumption that political leaders desire to remain in power as well as being influenced by behavioral incentives to adhere to the will of the coalition keeping them in power (Bueno De Mesquita et al. 1999, Bueno De Mesquita et al. 2003). "Indeed, it is commonly assumed that most if not all economic and political agents obey the maxims of consistency and coherence leading to the maximization of utility" (Quattrone & Tversky, 1988). Denktash's utility in this case is the eventual union of the TRNC with Turkey he has been striving for (B.A. Yeşilada, personal communication, April 27th, 2004), and by making himself indispensable to the Turkish Cypriot community by more fully reflecting their values, he could have remained dominant. Unfortunately for Denktash, the values of the Turkish Cypriot community have changed towards reconciliation, and his value of remaining in power for the purpose of pushing though his policy goal is becoming self-contradictory. Through constantly reiterating the identification of the Turkish Cypriots as targets for ethnic violence, he has been entrenching the conflict (Rothchild & Groth, 1995:69); obviously, further efforts to keep the communities segregated do not contribute to the resolution of the conflict, nor do those efforts seem to be in the best interests of the Turkish Cypriots any longer.

Denktash is primarily internationally known for his inflexibility in negotiating with the Greek Cypriot side over the recognition of the TRNC as an independent, sovereign state. The 1997 round of negotiations between Glafcos Clerides and Denktash over Cyprus's accession to the European Union represents a pattern Denktash has been repeating for years. "In the process of the negotiations, Denktash

raised issues that had a bearing on the relationship between the T/Cs [Turkish Cypriots] and matters of foreign policy, particularly with respect to the EU. In turn, Clerides argued that as these matters are state issues and not intercommunal issues, they couldn't be on the agenda of the negotiations. The process inevitably ran into a deadlock with Denktash declaring that he would not return to the negotiating table unless his state was recognized and the entry talks between the EU and the Republic of Cyprus were terminated" (Anastasiou, 2000:19). This refusal to negotiate with the Greek Cypriots until the TRNC is recognized as a sovereign state has been responded to on the Greek Cypriot side with a refusal to negotiate until the Turkish military leaves Cypriot sovereign territory. Needless to say, negotiations break down quickly, when Denktash and the Greek Cypriot leader can even be found in the same room (not often). Analyses of the course of negotiations have revealed that the Cyprus impasse can be modeled as a Prisoner's Dilemma, in which neither side has the motivation to unilaterally begin cooperating; of course, this also results in a socially suboptimal outcome (Sozen, 1999; Yeşilada & Sozen, 2002).

After the talks broke down in 1997, the next round began in New York on December 3, 1999. On November 15th, Denktash had declared he would attend UNsponsored talks on reunification. The so-called "proximity" talks—labeled as such due to the fact that Denktash and Glafcos Clerides, his Greek Cypriot counterpart, were in separate rooms close to each other, yet only speaking to the UN representatives involved in the talks—were agreed to by Denktash with the understanding that he would not come face-to-face with Clerides. Though Denktash and Clerides met separately with both Kofi Annan and Alvaro de Soto, the UN

Secretary-General's special adviser on Cyprus, Annan announced to the press that he did not expect miracles, a pessimistic view shared by most organizers of the negotiations. A violation of a ban on public statements committed by either Denktash or Clerides—no one knows who—contributed to the general malaise of the negotiations. The proximity talks continued through November 2000, interrupted in July by a large demonstration in Nicosia by Turkish Cypriots demanding Denktash's resignation due to increasing military involvement in public affairs. In November 2000, Denktash broke off the proximity talks in New York, claiming that the process could not continue without recognition of the TRNC as an independent and sovereign country, and recognition of himself as the president of the TRNC instead of as the leader of the Turkish Cypriot community. This is an obvious repetition of the conclusion of the Ledra Palace talks of 1997; Denktash used the same strategy of drawing out, then shutting down the negotiations. Recall that Denktash did not ever want to actually reach a solution involving reunification; doing so would damage his chances of achieving his aspiration level; however, he was beginning in 1999-2000 to face increasing pressure from the developing Turkish Cypriot civil society to relinquish some of his autocratic power over the community. Here, he faced the beginning of a separation between his goals and the power needed to achieve them.

In August of 2001, Kofi Annan met with Denktash in Salzburg, Austria to encourage him to begin participating once again in the peace talks; Denktash rejected Annan's request to meet in New York on September 12th, 2001—somewhat presciently, as it turns out—saying that no offer had been made by Clerides which would tempt him to the negotiating table. Denktash thought that the necessary

foundation had not been established for any form of negotiations, meaning that Clerides had not yet agreed to refer to him as the president of the TRNC. This was an attempt to make the other side acknowledge the validity of Denktash's goals. However, in November of 2001, Denktash pushed for a face-to-face meeting with Clerides. They met on December 4th, 2001 for the first time in years; Denktash waited two days before offering a warning concerning the optimism surrounding this meeting, saying that "it is wrong to enter into this with such high expectations." Though Denktash and Clerides met over the course of nine months in 2002, on September 6th, 2002, this round of peace talks also ended in deadlock, this time over EU membership for Cyprus as well as the status of the TRNC and Denktash. Denktash was erecting further barriers in an attempt to prevent reunification. In a last gasp, Annan attempted to bring both Denktash and Clerides back to the table in October 2002, dangling the first version of the Annan Plan before them. Kofi Annan's comprehensive plan for the resolution of the Cyprus problem involved a complex solution to the ongoing issues in the peace negotiations, including provisions for the Turkish Cypriots to give up part of their occupied territory to the Greek Cypriots, a reduction in the number of Turkish troops allowed in the north, and a reduction in the amount of Greek Cypriots allowed to return to the north to their lost properties. After rejecting the first Annan Plan, then viewing a revised version of the Annan Plan for only a few hours on December 10th, 2002, Denktash rejected it out of hand, claiming concerns of sovereignty and independence. Compromise would have been a risk averse choice, counter-indicated by prospect theory under the notion that Denktash was operating in the realm of losses. In December of 2002, Denktash failed to attend the Copenhagen Summit, and

sent a powerless deputy in his place. Predictably, the talks to broker a peace deal on Cyprus at the Copenhagen Summit ended in total collapse. This pattern of seeking, then rejecting negotiations served Denktash to draw out the course of the talks in a continuing attempt to prevent any roadblocks for the eventual independence of the TRNC, then its annexation to Turkey out of fear of the Greek Cypriots.

Denktash begins to shift to the risk seeking side of the value function as his political power becomes more tenuous. In fact, that shift is merely reflective of the shifting values of the Turkish Cypriots away from his hard-line stance. His political power was lessening as a result of the changing domestic political climate; he had to take risks with his position in order to achieve his goals. Still, his confidence in his ability to sway the Turkish Cypriot electorate has been borne out; he has never lost a contested election. Unfortunately for Denktash, the global situation has changed. The Turkish Cypriots feel their poverty even more stingingly in comparison to the south due to the high level of education in their community. Giant peace rallies in Nicosia during December 2002/January 2003 involved first 50,000-60,000 people, then 80,000-90,000 people. One would think that any political leader would immediately sit up and take notice if half the country's population showed up in the capital city. In a shift to a risk-acceptant choice (determined to be so since his political power was threatened), Denktash still would neither negotiate nor open the borders. Occasional talks by Clerides and Denktash over the Annan Plan during early 2003 ended on March 11th at The Hague in total failure despite heroic and marathon efforts by Kofi Annan to come to some sort of agreement. An offer by Denktash to begin talks again on April 3rd, 2003 with the new president of the Republic of Cyprus, Tassos

Papadopoulos, was rejected by Papadopoulos, who claimed that the UN peace plan was the only basis for negotiations. Though on April 23rd, 2003, Denktash opened the borders in a surprising goodwill gesture, his choice was less reflective of a fundamental shift in position than a need to release some of the building pressure in the north, as well as an attempt to maintain his hold longer.

Though the February 10th-12th, 2004 talks in New York under the sponsorship of Kofi Annan for the first time produced an agreement on a time-intensive schedule for negotiations and referenda on the reunion of Cyprus that was totally independent of Denktash's or Papadopoulos's ability to halt the proceedings, Denktash's choice to sign was not as risk-averse and calculated to win back his constituency as may at first be thought. Though continuing demonstrations in Nicosia by the Turkish Cypriots called for reunification—frequently using the EU flag as a symbol of their wish for peace and conciliation—Denktash's real position never changed. On April 2nd, 2004, Denktash announced that he would not support the newly revised Annan Plan, due to its intent to eventually reduce Turkish military strength in the north to a token force of 650. This specious objection, coming as it did after his boycott of the talks with Papadopoulos, shows once more his tactic of pushing for, then rejecting negotiations. The crashing defeat by the Greek Cypriots (75% of whom voted against the plan) of the April 24th, 2004 referendum on the Annan Plan, which both the Greek Cypriots and Turkish Cypriots needed to approve in order for reunification and the entrance of the Turkish Cypriots into the EU on May 1st, meant that only the south of the island joined the EU. Many Greek Cypriots believed that they had little to lose by voting no on the Annan Plan. After all, on May 1st, the Republic of Cyprus entered the

European Union regardless of whether Cyprus was reunified by that date. Though the Greek Cypriots have become EU citizens, demonstrated political will to end the conflict by the Turkish Cypriots (who approved the Annan Plan by a strong 65%, demonstrating their disagreement with Denktash) and not the Greek Cypriots can and probably will result in international recognition of the TRNC as a sovereign state. In addition, EU development funds (available to candidate states to aid them in their attempts to adjust to the *acquis communautaire*), which have previously been funneled through the Republic of Cyprus, are beginning to flow directly to the TRNC through EU offices opened in the north after the Greek Cypriot rejection of the Annan Plan.

The value for Denktash in not negotiating involves two elements—his political success and holding out for further concessions from the Greek Cypriot side. As political success and concessions from the Greek Cypriot side are beginning to demand different action due to the shifting demands of the Turkish Cypriots, his choice to continue to not negotiate jeopardizes his political success, and hence, his policy goal. Since Denktash's reference point and expectation level are the same (eventual union with Turkey), he views himself as constantly in the domain of losses, meaning that his choices are likely to be risk acceptant. Denktash's actions over the past 40 years, and especially since 1999, demonstrate a rising conflict between his prospective utility and reference point of eventual union with Turkey and his need to remain in power to achieve that goal. Since Denktash's reference point has not changed, he has remained in the realm of losses due to his inability to reach his expectation level—identical, in this case, to his reference point. The power of the prospect theory explanation in this case is its capacity to predict Denktash's actions in

megotiations; expected utility theory—and its newest permutations under Bueno De Mesquita—would have it that politicians maximize their capacity to retain office. The development of a value for Denktash and placing that value or prospective utility at his end goal means that prospect theory as a cognitive-behavioral approach has yielded more explanatory power than the other proposed methods when examining Denktash's choices throughout the recent negotiations. Denktash has made risky choices, based on the changing values of the Turkish Cypriot community. The relation of this case to other cases of leadership decisionmaking under conditions of risk also demonstrates the validity of using prospect theory to determine the conditions under which other leaders with similarly rigid views and policy goals may also make risk acceptant choices, perhaps to begin, prolong, or intensify conflict.

The main characteristics of prospect theory have been borne out in an examination of Rauf Denktash's negotiating style since the breakdown of the 1997 Ledra Palace talks. After viewing the value function not only as a spectrum of probabilities, but a path for action; Denktash continues to make risk acceptant choices, though the necessary decisions to achieve his policy goals mean that his chances of achieving his prospective utility have a decreasing probability of success. His intransigence in negotiations was not a risky position before the Turkish Cypriots began demanding peace and prosperity through reunification and membership in the EU. Levy's (1997) four questions—the framing of the reference point, the available options to the decisionmaker, their potential outcomes, and the values and probabilities associated with each—have been shown to be valuable in describing the decisionmaking style of Rauf Denktash; these concepts, especially the framing of the

reference point as Denktash's policy goals for the TRNC, have been valuable in showing the cognitive processes that this leader undergoes when deciding to negotiate or not over the reunification of the island. This historical overview of the negotiations and the use of the major concepts of prospect theory seem to show that Denktash has made risky choices—i.e. not negotiating after the major peace demonstrations of 2002-2003—to attain his goals which increasingly have not been in either his interests politically or the interests of the Turkish Cypriots. Understanding the decisionmaking style of this leader can lead to the understanding of other leaders embroiled in ethnic conflicts that may also make seemingly incomprehensible decisions in the context of attempting to maintain their political power.

Conclusion

There is no perfect way to fit the qualitative actions of a political leader onto the impersonal curve of a graph. Though expert opinion as to the risk of, and gains and losses achieved by, a given leader's decisions can be collected, the elegance of using money or another quantifiable, fungible asset to determine a person's true value function is not available to us. Regardless, empirical behavioral experimentation in rigidly controlled environments can provoke research—and hopefully insight—into the actual, imperfect, but fully human decisions of this policymaker. Expected utility theory fails to take the cognitive processes that determine the reference point and expectation level of the decisionmaker into account; as a result, prospect theory fleshes out the explanation behind, and hence possible prediction of, political decisionmaking at the individual level. The more extensive description of the cognitive process afforded by prospect theory has clarified Denktash's choices in the recent negotiations in a way that traditional theories of decisionmaking would not have been able to do. Utility maximization as a tool for predicting the outcome of the negotiations would have shown that risk averse choices by Denktash were most likely due to the assumption under expected utility theory that all decisionmakers are risk averse. In this case, Denktash has exemplified the tendency of a decisionmaker to make risk acceptant choices in the realm of losses. Further empirical work, perhaps in cases of decisionmakers negotiating over assets, could help to identify common themes in the selection of reference points and hence yield insight into the likely outcome of negotiations in crisis bargaining situations. Hopefully, future negotiating impasses will not be quite so impassable.

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