

## RESEARCH ARTICLE

# Prospect Theory: Contributions to Understanding Actors, Causes and Consequences of Conflict in Africa

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## Introduction

Despite many recognized shortcomings, Rational Choice Theory remains the dominant perspective on decision-making in the literature on African conflict, whether overtly acknowledged or not. Prospect Theory, originally derived from the field of behavioural economics, can complement and advance this perspective not only by explaining the behaviour of actors, but also by allowing for predictions and the devising of strategies to avoid or end on-going conflicts based on a set of systematic biases that influence how actors make decisions. After a brief definition of Prospect Theory, this work will begin with an overview of the existing literature on decision-making as it relates to conflict, examine how Rational Choice is inadequate in explaining much human behaviour and thus how Prospect Theory can fill this gap. It will then move on to give a fuller definition of the various hypotheses derived from Prospect Theory that pertain to the study of conflict. An example of the application of Prospect Theory to a related field in which thorough research has been conducted, Deterrence Theory, will be used to demonstrate the model's potential for study in other areas. This will be followed by a more

in-depth analysis of the ways in which Prospect Theory can contribute to understanding the behaviour of actors in war, the causes of conflict, and the consequences in the African context. It will conclude with a summary and proposition for further research that can advance this analysis.

A definition of Prospect Theory relies on three basic observations of human nature: 1) actors judge consequences on the basis of a reference point 2) an actor's value function is steeper for losses than for gains and 3) actors are risk-averse for gains and risk-acceptant for losses (Kanner 2004). The process by which decisions are made is divided into two stages. The first, 'editing,' comprises identifying the gains and losses involved with various outcome options and defining them based on a neutral reference point. During the second phase, 'evaluation,' the alternative outcomes are weighted according to subjective biases (Timmermans 2010). These biases alter the decision-making processes of actors, both consciously and subconsciously, in ways that are consistent, predictable and that produce results often wholly contrary to those expected from a standard cost-benefit analysis. In sum, I will attempt to show that the assumption that actors evaluate various options based on their estimated costs and benefits, ultimately choosing the one that affords them the largest expected utility, is entirely simplistic and ignores the reality of human cognitive functioning.

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### Theories on Decision-Making

The diverse literature on African conflict can be thought of as existing on a continuum. At the one extreme are deterministic, essentialist, or even racist theories which claim that conflict in Africa is a result of unique African culture, genes, or biology (Bock 2009). Examples include 'The Coming Anarchy' by Kaplan (1994) and various works by Chabal and Daloz (1999), who reduce their arguments to either an 'apocalyptic' or 'culturalist' view (Mkandawire 2002: 183). Moving towards the middle of the continuum, one finds the greed/grievance nexus, which, while convincing for many, often leaves out part of the story by focusing on only one or two motivations (Bock 2009). The other extreme is Rational Choice Theory, which argues that all human behaviour is explainable as the consequence of utility-maximizing calculations. Since Rational Choice is the dominant paradigm and has served as the basis for numerous other explanations of human behaviour, I will begin with an overview and examination of why it is insufficient as a single perspective through which to analyse conflict on the African continent.

#### *Rational Choice*

The quintessential model of rational choice is that of Nash's 1950 article 'The Bargaining Problem' (Kanner 2004). This model assumes 'well-defined actors who know they are in conflict, know their strategic options... have stable evaluations of possible outcomes,' and who are seeking to maximize their strategic payoffs, which not only drastically limits its utility for analysing African conflicts, but human behaviour in general (Friedman 1983: 375). The long list of assumptions also includes that each actor has complete information about the alternatives, outcomes and others' preferences, that their utility is a linear function, and their preferences consistent (Kanner 2004; Monroe 2001). Clearly, a theory that seeks to explain conflict based on these premises will 'oversimplify the motivations of perpetrators' (Bock 2009: 113).

Another significant criticism of Rational Choice models is that they are ahistorical, meaning that they exclude the influence of interactions on utility calculations and that they '[abstract] the moment of choice from its historical and social context' (Friedman 1983: 376). Africa, for various reasons, is notorious for long-lasting and continually perpetuated or restarted conflicts. Removing decision-making from the context therefore has particular consequences for African Studies; it is essential that we maintain a current and adapting understanding of the changing situations in which decision-makers find themselves at various points in time; before, during and after a conflict. Limiting our analysis to a single or even a few points of time in the experience of a decision-maker will inevitably exclude a large part of the story. It is important to take into account that the pattern of interaction changes actors' evaluations of their options, possible payoffs and even their preferences.

Rational Choice also ignores or discounts motivations other than 'narrowly self-interested behaviour,' which is often given as the very definition of rationality, and assumes that actors get 'no satisfaction from benevolence, malevolence, or the adherence to principles' (Mansbridge 1995: 137–8). While these formal models can be helpful to examine some aspects of behaviour, they also leave out a significant portion, especially in the African context where one must be careful to take account of the dual-levels of public life, such as expounded by Ekeh (1975), the impacts of the colonial legacy and sensitivity to neo-colonialism and other such aspects (Mansbridge 1995).

Finally, Rational Choice 'distorts our image of the individual' (Mansbridge 1995: 143). States are not unitary actors, and their interests are not necessarily coherent or succinct either. A state's self-interest cannot always be clearly determined even by internal policy-makers or leaders, and rational choice mostly requires that actors are separate individuals, with separate interests and prefer-

ences that are determined individually and in a vacuum (Mansbridge 1995). Besides the obvious facts that states do not behave as individuals and that individuals and states are not always the only primary actors in conflict, actors are also constrained in their roles of representing the state,<sup>1</sup> and therefore the interpretation of individualistic actors is often inaccurate.

An example of the limits of Rational Choice is demonstrated by the debate on the participants in war. Humphrey and Weinstein's study (2008: 452) comparing the motivations of combatants versus those of non-combatants shows that 'social pressures that emanate from friends and community members' are indeed an important factor in the motivations behind participation in a military faction, indicating the importance of an understanding of motivation that moves beyond just narrow self-interest. Their quantitative analysis suggests that in the Sierra Leone civil war, community cohesion was the strongest predictor of participation in the Civil Defence Forces (CDF), the group with higher rates of voluntary recruitment than the abduction-reliant Revolutionary United Front (RUF) (Humphrey and Weinstein 2008: 438, 453). This is an example of a situation in which Rational Choice explanations of participation motivated purely by economic or political gains, and also the greed/grievance argument, fail to adequately explain variations in participation. Relative social and economic interests are more predictive, due to the importance of perceptions in altering behaviour, a broader interpretation of self-interest, and relative positions or gains in a wider society. While the importance of objective security, opportunities and economic gains must not be discounted from a soldier's decision to participate, the case of the CDF is evidence that broader interests such as community loyalty and social ties must necessarily factor in as well. The question is how to systematically analyse these various motivations and their effects on decision-makers and outcomes.

### ***Advances: Bounded Rationality and Prospect Theory***

Bounded Rationality is an advance on straightforward utility theory that posits that decision-making is limited by an actor's means and capacities: the influence of incomplete information, culture, history and context. It includes the concept of satisficing: that an actor settles once he has found an option which satisfies some minimum requirement, even if it is not the optimal one, due to limits and prejudices in his cognitive functioning (Monroe 2001). The method that this work promotes is Prospect Theory, which examines how self-interest or other motivations, such as altruism or adherence to principles, can be altered by cognitive biases. Like Bounded Rationality, Prospect Theory is a 'loosening of... [the] underlying assumptions about rationality,' increasing its applicability to real situations (Kanner 2004: 217). It is widely recognized that assuming utility-maximization is often simply not true, but much literature has focused on how 'individual preferences towards risk do affect cooperation,' without formally adapting the Rational Choice Theory (Kanner 2004: 215). Prospect Theory is thus helpful in providing an explanation of the systematic and therefore predictable ways in which preferences towards risk can be affected by factors exogenous to the actor. It compiles a deeper understanding of the perceptions and uncertainty of actors and their resultant effects. Therefore Prospect Theory could be seen as a complement to, or extension of, Bounded Rationality in that it carries the same assumptions (imperfect information, self-interested motivation) but expands on the base principle of utility calculation by examining various ways in which it can be manipulated by the brain. Utility maximization is not the 'factors-in product-out black box' that it is often made out to be. Rationality and cognitive theories can thus 'coexist as complementary pieces of a larger whole,' (Berejikian 2002a: 167).

Because of these advances offered by Prospect Theory, its use can hence contribute to

predicting behaviour before, during and after conflicts, but also in developing strategies for dealing with actors while a conflict is on-going. In other words it can be used to manipulate how an actor perceives his/her situation, and therefore how they will react. This theory not only enriches our understanding of how rational humans behave most of the time by adding layers to the neatly parsimonious theory of Rational Choice, but in addition this layering does not detract from its predictive or consistent nature. This is because the irrational heuristics which Prospect Theory describes, such as risk averseness, are nonetheless still systematic and therefore predictable. Its utility thus supersedes that of an individualistic theory such as Waltz's First Image (Waltz 1959), which inevitably has limited reach or explanatory power and has already been largely marginalized in the conflict discourse, discredited even by Waltz himself.<sup>2</sup> In summary, Prospect Theory is an advance on utility-maximizing Rational Choice in that while it accepts the importance of self-interest in motivating much human behaviour, it helps to explain areas where self-interest is not the driving force, or where it is manipulated to produce an irrational outcome (Monroe 2001). Prospect Theory thus combines both the psychological and the strategic (Butler 2007).

### **Prospect Theory: an Elaboration and Resultant Hypotheses**

By incorporating the three base observations that define the Prospect Theory model, the importance of the context in which decisions are made is included and emphasized, thus eliminating the ahistorical and invariance problems of Rational Choice, and helping to illuminate the issues (and effects) of imperfect information and of perspective (Kanner 2004). Prospect Theory aims to explain the 'consistent heuristics and biases' that affect individual choices (Berejikian 2002a: 166).

There are various theories derived from these basic observations that fall under the umbrella of Prospect Theory, and which can

apply generally to the study of conflict. First, and foremost, is the fact that 'decision-makers evaluate each choice anew and against a neutral reference point' in contrast to the single function posited by Rational Choice Theory (Berejikian 2002a: 170). Other theories have made use of similar psychological referencing processes in their arguments. Jervis, for example, argues that in signalling on an international level, actors will 'perceive events in light of how [they] perceive the sender of the signal,' (Monroe 2001: 161). These predispositions then determine whether actors are seen as hostile or whether signals, promises and threats appear credible (Monroe 2001). In a cognitively similar way, Prospect Theory argues that actors' behaviour is dependent on the setting of a reference point against which they evaluate outcomes and which, whether consciously or not, affects their willingness to accept risk and thus their decisions. According to Kahneman and Tversky 'Value is [therefore] assigned to gains and losses rather than to the final asset' (1979: 1).

Because of the relationship between framing and risk aversion or seeking mentioned above, preferences are reversed depending on whether they are viewed as potential gains or losses, a phenomenon termed the 'reflection effect' (Kahneman and Tversky: 1979). Related to this is the 'disposition effect,' which refers to an actor's tendency not to want to cash in on a loss, but be willing to recognize a gain (Kahneman and Tversky: 1979). Other heuristics include the 'status quo bias' and the 'endowment effect,' also known as 'divestiture aversion,' which explains how a person requires more to give something away once they have already established ownership rights over it than they did to initially obtain it (Kahneman, Knetsch and Thaler 1991).

The 'certainty effect' observes that certain outcomes are overweighted relative to those that are uncertain, even though extreme events with small probabilities tend to be relatively overweighted, a demonstration of the clear irrationality of much human behaviour

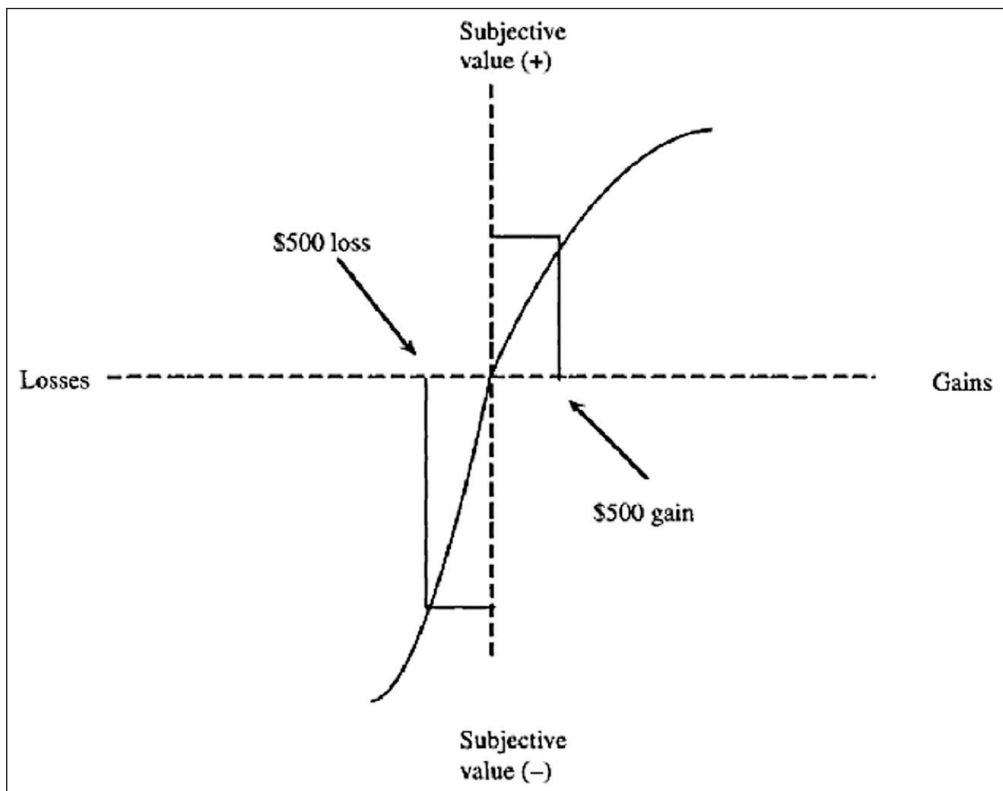
(Kahneman and Tversky 1979; Butler 2007). Finally, the 'isolation effect' posits that 'in order to simplify the choice between alternatives, people often disregard components that the alternatives share, and focus on the components that distinguish them' leading to 'inconsistent preferences' when the same choice is presented in different ways (Kahneman and Tversky 1979: 1–10). All of these effects, either singularly or in combination, influence the way that a decision-maker analyses a situation, the risk that he is willing (consciously or not) to accept, and his eventual action.

### Applying Prospect Theory to Conflict *An Example Application*

Examining a related and comparable field, deterrence, in which significant progress has been made applying Prospect Theory,<sup>3</sup> can help to demonstrate its further potential

for the study of conflicts within Africa. The model, in simplistic terms, depends on the observation that there is a 'diminishing utility to continually increasing gains' (Berejikian 2002a: 170). As a result, the 'value function for individuals with respect to gains is concave, representing a curvilinear relationship between increasing gains and subjective value' and the exact opposite, that is a convex value function, is true for losses (Berejikian 2002a: 170). In addition, 'losses hurt more than a gain feels good,' and thus the value function is steeper for losses than for gains, as is evident in **Figure 1** below.

This feature helps to explain when deterrence will fail, and thus conflict will result. In a deterrence scenario, the targeted state faces a choice between the status quo, whose benefits are known, and risking defection to improve their position (Berejikian 2002a). According to Prospect Theory, the



**Figure 1:** Subjective Utility Functions under Prospect Theory. Source: Berejikian 2002a: 171.

all-important factor is whether this actor is in a gains or a losses frame of mind. When the risky action presents an expected value of potential gains, we say that actor is in a gains frame. When the opposite applies, they face losses. When the actor is in a gains frame they will be risk-averse and likely to accept the status quo. Conversely, when they are in a losses frame, they will act in a risk-acceptant way and are likely to defect from the status quo; this is when deterrence has failed and conflict is likely (Berejikian 2002a). Thus, the probability of conflict increases significantly if one, or both, actors are in a losses frame<sup>4</sup> (Berejikian 2002b). This revelation has led to the development of numerous strategies to improve the performance of deterrence threats by placing the target state actor in a gains frame in order to increase the likelihood that they will refrain from risky defection from the status quo. The possibility of manipulating a state's behaviour based on its frame of mind also has other far-reaching consequences within the international relations arena.

Nevertheless, the principle of deterrence is questionable when analyzed through the lens of Prospect Theory (Berejikian 2002b). If one accepts the realist assumption of an international state of anarchy, the doctrine of conservative planning will create insecurity, and deterrence threats will force a target state into a losses frame where one may not even have existed before, making their acceptance of the risks of military action more likely. Deterrence threats can therefore 'produce the very aggression they are intended to deter,' and thus in order to successfully avoid conflict a deterrence policy must also avoid forcing the target state into a losses frame (Berejikian 2002b: 769). As a result, an intermediary 'firm-but-fair' strategy, one that coerces the actor without pushing him over the edge into foreseeing losses on his current position, is most likely to succeed (Berejikian 2002b: 770).

Prospect Theory has also been extensively applied to bargaining and negotiation, in

which steps are being taken to develop a formal model.<sup>5</sup> While this paper will not go into great detail on the negotiation models, they are helpful in illuminating aspects related to causes of war, when peacetime negotiations break down, and also to consequences of war, when conflict resolution negotiations fail, and thus will be dealt with in the sections below.

### ***Prospect Theory's Contributions to Understanding Actors in African Conflict***

Analysing how Prospect Theory can contribute to understanding African conflicts must begin with an evaluation of its effects on the behaviour of both individual and group actors in causing war and within conflict situations. Butler demonstrates that an actor's reference point can be based on territory that they control or hope to gain, as exemplified by the Israel/Palestine conflict (Butler 2007). In this example, changes in leadership result in altered reference points, and the Prospect Theory model illuminates precisely when demands that will result in conflict will be made. Related to this is the endowment effect. When analysing territory disputes Prospect Theory instructs us to remember that an actor will value land they already view as their own more highly than that which they hope to gain. This can create room for negotiation by manipulating any side that might have weaker motivations and is perhaps showing aggression over the territory for other reasons. Alternatively, the agreement winset is narrower if both sides view the territory as their existing possession, but it is at least helpful for forming a solution to understand the greater requirements needed for accepting divestiture of the land, which can enable actors to avoid conflict. Disputes over areas claimed by both Sudan and South Sudan, for example, that appear intractable may only be so because sufficient compensation has not yet been offered, not because neither side is willing to give up the territories at all.

Ethnic conflict is a hotly disputed issue in the dialogue on African conflict. It is often viewed to be a consequence of the behaviour of 'predatory elites' who either, according to the Rational Choice model, 'provoke violence as a way of maintaining power,' or as the Symbolic Politics Theory dictates, perpetuate 'hostile myths' that produce 'emotion-laden symbols that make mass hostility easy for chauvinist elites to provoke' (Kaufman 2006: 46–7). If one chooses to accept this elite- and actor-driven hypothesis, Prospect Theory can provide an alternative rationale here for the 'different outcomes of ethnic politics,' in proposing that conflict erupts in certain cases and not others as a result of the context in which decisions are made regarding whether to initiate the use of force or violence, the perceptions of these elite actors, and how these factors affect their cognition (Kaufman 2006: 47).

A similar example in which an actor's agency and decisions are important features of a conflict situation is the phenomenon of civilian victimization. While consensus on the causes of civilian abuse is limited, Humphrey and Weinstein (2006: 441) demonstrated that 'internal factional attributes including the characteristics of a group's membership, how they were recruited, and how they relate to one another are key factors that help to explain variation in levels of abuse in the Sierra Leone conflict.' Previous literature, such as Perspective Theory, provides various other explanations. Monroe (2001), for example, argues that it is the dynamic shifting of an actor's identity, often from that of an individual to a member of a group, based on a context that makes certain identities more salient, that explains his/her behaviour. This explanation is at one end of the spectrum, arguing the importance of social ties, cultural norms and forces of socialization in determining whether an actor will choose to act as an individual or as a member of a larger group to which he feels he belongs. Rational Choice would fall on the other end in positing that behaviour

is the output of utility calculations based on specific preferences and option analyses (Monroe 2001).

Prospect Theory can serve as a middle ground alternative incorporating aspects from both extremes. It can help us to understand situations in which actors will forego opportunities to act in their own self-interest in order to serve the interests of the group. In cases where engaging in civilian abuse is in an individual's interest but against that of the group, Prospect Theory would argue that proxies for internal cohesion are strong explanatory variables in determining when civilians are abused because an actor's utility is reference-based and extends beyond narrow self-interest. The actor does not see the individual benefits of abusing a civilian in objective terms but in relation to how it affects his standing in the group and the overall goals of the group in general. When he gains objectively or subjectively from belonging to the group, he will be less willing to compromise those gains by defecting from accepted behaviour. Thus, when facing gains or in a positive frame, he will be risk-averse to engaging in group-damaging behaviour, even if the objective gains from looting, raping or other civilian victimization appear rationally larger.

On the contrary, it has often been noted that armies facing imminent defeat or in retreat are more likely to engage in civilian victimization.<sup>6</sup> In this scenario, a soldier is in a loss frame of mind, and much more willing to risk his position in the group by engaging in individually-rewarding behaviour. Downes (2008), for example, finds strong evidence that government forces that are desperate to win a war, avoid their own casualties or avert defeat are likely to deem civilians legitimate targets in order to achieve their goals. In the African context this trend was clearly evident in the Second Anglo-Boer War, when British forces used scorched earth tactics and concentration camps to defeat the guerrilla Boer armies. The British adopted a strategy of civilian victimization only when what appeared

to be their imminent victory took a change in course and they became desperate to halt rising costs and overcome their inability to defeat the guerrillas (Downes 2008). In this case it was not the individual decisions of soldiers that lead to this behaviour, but a calculation by the upper-echelon military command facing losses to accept the risk of international condemnation and domestic dissent that would accompany violating the laws of war. As such this case is instructive in demonstrating the ability of Prospect Theory to explain not only individual irrational behaviour occurring in the chaos of a conflict situation, but also that of a group of policy-making strategists; a group within a professional army of a democratic country no less.

This case serves to illuminate another aspect of civilian victimization as well: the fact that it tends to occur when 'strong actors are... battling weak actors who employ guerrilla strategies' (Downes 2008: 156). A purely rational analysis is unable to explain why an actor would need to resort to such widely unacceptable and destructive behaviour when the military balance is clearly in their favour. Prospect Theory, however, would posit that the reference point is the important factor in determining a strong actor's choice of strategy. Despite the fact that objectively they can dominate decisively using military prowess, the perception that any losses at all will be suffered in the context of their numerous gains is unpalatable to the strong army, and civilian victimization thus results as a desperate tool to avoid such losses. In summary, leaders are 'more willing to risk large losses in the hope of eliminating small losses altogether' (Levy 1996: 179).

The status quo bias is an additional hypothesis of Prospect Theory. It postulates that given equal utility outcomes for maintenance of the status quo and some scenario of change, an actor is biased toward the former. In fact, even in situations where the utility of the status quo is less than the potential utility resulting from a change, up to a certain point an actor will predictably lean towards maintaining their current posi-

tion (Kahneman, Knetsch and Thaler 1991). This phenomenon can explain appeasement efforts, as well as the continuation of war in situations where it appears the destruction and horror of the conflict would predict otherwise. Amongst African conflicts, which are notoriously drawn out and prone to revival, this is particularly helpful. In the first instance, the status quo bias might be useful in understanding the National Party's (NP) continuation of the fight against liberation activists in the South African Apartheid struggle. Despite significantly rising costs as a result of the rejuvenation of the liberation movement after the 1976 Soweto uprisings, the intensification of international sanctions and the loss of friendly neighbour governments in Mozambique and Angola with their respective declarations of independence, the ruling NP continued to view maintenance of the existing Apartheid system as preferable to any liberalizing reform measures. Marginal, though ultimately more expensive, actions to maintain the overall status quo were viewed as superior to significant changes that might mitigate their growing costs.

Similarly, understanding the continued existence and operation of the Lord's Resistance Army in Uganda might be advanced by interpreting it as the maintenance of a status quo that now appears more comfortable to the group, and particularly to Joseph Kony as leader of a group that relies largely on abduction and coercion techniques, than a change to civilian livelihoods. It becomes clear that the potential compensation needed to lure an actor away from the status quo must be significantly larger than what is accrued in the currently maintained state. Alternatively, and as was seen in the case of the NP above as well, the costs to maintaining a conflict must be made considerably greater to overcome this bias. Taking into account the S-shaped value function of actors, according to which losses hurt more than comparable gains are valued, this latter strategy appears more likely to succeed with lower effort and expending of less resources.



Another area in which actor's decision-making can be influenced by Prospect Theory biases is cooperation situations, such as the thoroughly-analysed Prisoner's Dilemma (PD). This can result in conflict if cooperation is unattainable; can exist in conflict-resolution scenarios altering the resultant consequences; or even exist within an ongoing conflict environment, affecting actors' behaviour. As an alternative to the traditional utility-maximization model of the Prisoner's Dilemma, this game can also be modelled using Prospect Theory (Berejikian 2002b). By including an assessment of the status quo, which puts the participating state into either a losses or gains frame, the Prospect Theory model modifies results predicted by the Rational Choice model. In a gains frame, a risk-averse actor will tend to accept the certain payoff of the status quo and continue cooperation, while a risk-acceptant actor in a losses frame will tend to risk the losses accompanying defection from an existing cooperation agreement when that cheating offers the possibility of a payoff. This scenario is assuming the existence of an institution that has helped to establish and support cooperation and that the actors have demonstrated conditional cooperative strategies in the past. These assumptions form the basis of traditional 'escape mechanisms' for the PD, but Prospect Theory demonstrates that achieving cooperation is not nearly as simple as they suggest. Similar prognoses apply to more general collective action situations as well (Berejikian 2002b).

### ***Prospect Theory's Contributions to Understanding Causes of Conflict in Africa***

Besides the direct effects of cognitive biases on the behaviour of the actors examined above, Prospect Theory can also predict other influences on the causes of conflict. In general, Prospect Theory predicts that when an actor faces conditions of loss, he or she 'will risk the use of military force even when the probability of success is low and diplomacy has a better chance of producing a less

desirable outcome' (Berejikian 2002b: 764). More specifically, loss aversion and framing can also have effects on the vigour or motivation with which a state or other actor will pursue a military venture. Actors are likely to be more aggressive when pursuing strategies aimed at loss avoidance than when the goal is to make new gains,<sup>7</sup> and political actors are found to receive greater popularity increases from military operations that avoid loss than those that seek gains (Berejikian 2002b). Thus, we can see that when an actor is in a losses frame, conflict is much more likely, and the scale and intensity of the war is likely to be greater. In addition, these analyses demonstrate that Prospect Theory can predict not only the decision-making behaviour of individual leaders in positions of power, but also the domestic political incentive structure.

Prospect Theory may also help to shed some light on the controversial Diversionary War Theory of causes of conflict. As proposed by Levy (1986), a leader of a state that is experiencing significant domestic problems, such as economic distress or public dissent, may initiate a foreign military operation in order to 'boost the nation's cohesiveness [the notorious 'rally around the flag effect'], to enhance the leader's popularity, and to thus increase her chances of remaining in power' (Tarar 2006: 169). While the accuracy of this theory remains under debate, and convincing empirical evidence has yet to surface in support of it, some analysts continue to perpetuate it and suggestions have been made that Uganda's Yoweri Museveni was influenced by such incentives when he mobilized his troops in support of Rwanda to enter the both the first and second Congo Wars of 1996 and 1998.<sup>8</sup> Applying Prospect Theory, international military action represents a risk leaders are more willing to take if they are facing a threat to their position, that is, they are in a loss frame (Levy 1992). Rather than viewing this decision as an opportunity for objective gains, which seems far-fetched, it is more likely that it merely represents a risk that an actor becomes more

willing to take given the prospects he faces domestically, leading to events justifying the hypothesis, but explaining why it is not widely observed or convincingly supported by observed data.

The principle of reference-based utility necessarily has an effect on the frame within which an actor perceives himself, as was discussed above. McDermott (1992) makes an interesting case for Prospect Theory's descriptive power in arguing that President Carter was in a losses frame both internationally and domestically at the time of the Iranian hostage crisis in April 1980. Consequently, he accepted the proposition of a risky military operation in order to avoid these perceived losses, demonstrating risk-acceptance extraordinarily higher than is evident in his actions at other times (McDermott 1992). Understanding this potential for loss aversion and risk-acceptance can be extremely useful in analysing more precisely when an actor is likely to risk taking military action to avoid losses, and thus initiate conflict. Conversely, if the prospect of conflict is viewed as an outcome with sure and desirable consequences, whereas refraining from military action is seen as the risky option, an actor will be predisposed to initiate conflict if they are risk-averse as a result of being in a gains frame. This hypothesis might help to explain the widespread existence and persistence of sub-national militia groups in Africa, who find that arming themselves and participating in battle provides more certain benefits than the insecure environment of civilian life, in which state breakdown and economic uncertainty create a difficult and risky situation.

Within negotiation situations, as mentioned above, Prospect Theory can help to determine when conflict can be avoided, and how to do so. For example, even when actors have extreme reference points with regards to what they hope to achieve or what they view as the status quo and thus an outcome that is acceptable, conflict is not inevitable (Butler 2007). Thus, understanding how ref-

erence points affect the behaviour of actors within a negotiation can contribute to analyses of why conflicts do erupt. For example, using Prospect Theory, Butler predicts in which circumstances negotiations are likely to fail and result in conflict. He uses the case of a simple ultimatum game with two actors. The status quo is not necessarily directly in line with an actor's reference point, thus when he or she is choosing between the status quo and the prospect of a conflict, both these scenarios may be in either a gains or a losses frame, influencing how willing the actor is to accept risk (Butler 2007). In this way the predictions for behaviour based on the status quo bias above can be enriched to include variations for when the status quo is not in line with an actor's reference point.

Similarly, Butler's analysis of negotiations is helpful in examining certain circumstances in which the endowment effect can contribute to a breakdown in the negotiating process and result in conflict. He cites Levy's (1996) argument that in a situation where one actor, B, has made 'a tangible gain' at the expense of an actor A, then 'the endowment effect suggests that [B] will accommodate to its gains much more quickly than [A] will accommodate to its losses. Consequently [A] will attempt to recover its losses and restore the old status quo, and [B] will attempt to maintain the new status quo against [A]'s encroachments. Each will accept larger than normal risks to maintain its version of the status quo' militarily, which consequently increases the likelihood for conflict (Butler 2007: 243). Butler finds that this projection holds, but only with the condition that both actors have zero or vanishingly small costs for a contest and within narrow midrange parameters for probabilities of winning (Butler 2007). Corroborating other analyses,<sup>9</sup> Butler states that the existence of low barriers to entry in a conflict is however still a strong predictive factor. He claims that if the costs of conflict are zero for actor A, conflict is possible for almost all values of A's probability of winning. Nevertheless, as the costs

of conflict rise, the potential range for such an outcome shrinks, and at the extreme of perfect and complete information, conflict is no longer possible (Butler 2007).

Finally, the isolation effect may also have an effect on the causes of war when inconsistent preferences can lead actors to see no overlapping winset for their interests when one does actually exist. Similarly, the overweighting of extreme events with small probability may lead to the adoption of an offensive strategy when it is not necessary or is avoidable, resulting in conflict.

### ***Prospect Theory's Contributions to Understanding Consequences of War in Africa***

One of the clear consequences of war that has already been demonstrated<sup>10</sup> is the contribution of its destabilizing effects on the revival of conflict in an area, whether as a continuation of the previous war, or in precipitating a new or somehow different conflict. This is a particularly noticeable feature of conflict in Africa. Prospect Theory can contribute valuable insight in understanding why this is so, and how these situations can be avoided.

As was touched on in the section regarding causes of war, using a formal model Butler shows how various types of reference points affect the way in which actors will negotiate. For the purposes of evaluating consequences, the same potential situations will apply and this deeper understanding of the dynamics behind negotiating behaviour can also contribute to explaining when peace negotiations are successful or not in preventing the continuation of conflict and why. This will also contribute to developing prescriptive strategies for dealing with ending conflicts in Africa. Additionally, it is useful to observe that bargaining behaviour differs most noticeably from that predicted by traditional Rational Choice utility calculations when actors place greater importance on equity, as opposed to on relative power. This is when Prospect Theory becomes most instructive (Butler 2007).

Similar situations for bargaining failures that are explicated by Kanner can also apply to conflict resolution negotiations. Kanner (2004) posits that an actor's frame of reference is a consequence of their assumptions and beliefs, and as such can be manipulated in a bargaining situation to alter that actor's behaviour. This can be done either by changing the actor's confidence in the future domain or by forcing the actor into a certain domain by 'discounting the utility of a course of action,' thus altering their risk perception and ultimate behaviour (Kanner 2004: 213). In this way, a weak actor is able to improve their outcome relative to a strong actor. But what can this analysis teach us about improving the chances for a negotiated settlement that both parties agree to, and thus avoiding continued conflict? When one actor is satisfied with the status quo but the other is not, the second actor may use manipulation to '[reduce] the first actor's levels of confidence in the working assumptions and [introduce] the shadow of the future into the negotiation' (Kanner 2004: 214). In this way, the first actor is put into a loss frame as the utility of the status quo is reduced in his perspective, and as a result he is more willing to accept riskier propositions. This process can open up more potential outcomes that are acceptable to both actors, increasing the chances of a settlement.

Kanner's model thus explains how an extended continuation of negotiations can result in a settlement that was originally rejected by one or more parties, and he believes it is particularly pertinent to ethnic conflicts in which 'settlement appears impossible,' a feature that is clearly visible in many African conflicts (Kanner 2004: 214). He uses the example of the Yugoslav Wars, arguing that Milosevic 'might have been more amenable to changing his policies of ethnic conflict if his confidence in the assumption of regime survival had been reduced or if he saw a decrease in the "spoils" that he would have to divide among his supporters,' (Kanner 2004: 235). A similar strategy might

thus apply to al-Bashir of Sudan, or actors in other potential future conflicts on the continent. Although the model assumes a non-zero-sum and non-cooperative game, it is nonetheless a significant step in developing a formal model using Prospect Theory to not only explain and predict bargaining behaviour, but that can also instruct actors on how to reach a settlement. As such, Prospect Theory can serve as a useful addition to the already rich theory on bargaining manipulation tactics, which have mostly focused on agenda setting to control voting outcomes (Kanner 2004).

Lastly, the framing and reflection effect suggests that actors are more likely to risk continuing war as they get more desperate and fall deeper into a losses frame. According to Levy (1992: 296) this explains 'why states frequently find themselves continuing to follow failing policies far longer than a standard cost-benefit calculus might predict (Jervis 1992), in the desperate hope that they might recover their sunken costs.' Examples of such 'futile military interventions or prolonged wars' within Africa might include Gaddafi's attempt to maintain power in Libya during the popular uprising of 2011 (Levy 1992: 296).

## Conclusion

Prospect Theory can therefore contribute in a variety of ways to understanding the behaviour of actors, the causes and the perpetuation of war in the African context. The underlying dominance of Rational Choice Theory in explaining decisions made by conflict actors within the scholarship on Africa leads to the neglect of a significant portion of human behaviour, specifically as it pertains to the consistently irrational biases of actors' cognition. By understanding when actors are likely to take risks, leaders can more successfully avoid conflict. By explaining how these heuristics cause actors to behave, scholars can better appreciate what precipitates their behaviour. Finally, by decreasing the uncertainty of conflict-resolution situations, negotiators can make peaceful agreements more

likely. Thus, Prospect Theory can greatly contribute not only to understanding past conflicts in Africa, but also to generating strategies for manipulating on-going crises and avoiding such situations in the future. For example, by forcing a leader into a losses frame, as was done to Gaddafi by constricting his possible exit strategies through the issuance of an International Criminal Court indictment, not only is the potential for a peaceful resolution decreased, but the risk-acceptant attitude of the actor makes his behaviour even less predictable and likely to cause destruction.

The major questions that thus remain are firstly how to determine the frame of mind in which an actor is operating, and how other actors can manipulate that perspective in order to make conflict less likely or peace obtainable. Further research is needed to complement this introduction to the topic in order to develop a more formal and reliable prescriptive model for analysing an actor's frame and consequently for manipulating it. The various Rational Choice models that have been developed to analyse what was previously assumed to be cost, benefit and expected utility calculations of decision-makers can be instructive in this pursuit, as they will involve similar examinations of an actor's environment, perspective and idiosyncratic decision-making processes and tendencies.

This analysis aimed to contribute to the study of African conflict by warning against the dangers of assuming rationality when considering the behaviour of actors. It has demonstrated that there remains significant room for further research into how Prospect Theory can contribute to this scholarship and for the development of formal models to do so.

## Notes

<sup>1</sup> I am referring to the dynamics of two-level games as first expounded by Putnam (1988).

<sup>2</sup> See reviews of Waltz's work such as that by Singer (1960).

- <sup>3</sup> See Berejikian (1997); Schaub (2004) and Levy (1992).
- <sup>4</sup> This is a simplification. For a more detailed analysis see Berejikian (2002b).
- <sup>5</sup> See Kanner (2004) and Butler (2007).
- <sup>6</sup> See Kathman and Wood (2012); Chenoweth and Lawrence (2010); Tokushi in Wakabayashi (2007).
- <sup>7</sup> See Blechman and Kaplan (1978).
- <sup>8</sup> Clark (2001).
- <sup>9</sup> Such as Weinstein (2007); Young (2002); Collier and Hoeffler (2004).
- <sup>10</sup> Sørli, Gleditsch and Strand (2005); Collier, Hoeffler and Söderbom (2008).

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