

# The Decision for War and the Limits of Rationality

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'So what do you suggest one does, Professor, if one is not to indulge in this futile... arguing stuff?'

'Agree to disagree,' he said. 'Or fight.'

'Fight?'

He shrugged. 'What else is left?'

'Negotiate?'

'Negotiation is a way to come to a conclusion; it's the type of conclusion that I'm talking about.'

'Which basically is disagree or fight?'

'If it comes to it.'

—Iain M. Banks, *Use of Weapons*

The question 'Why do wars happen?' has probably been asked since the first battle was fought, or at the very least since the first casualties failed to come home. It is a sweeping question encompassing nearly every field of human study, from biology to technology, economics to ethics. As Hidemi Suganami has written, it is a question that in itself is philosophically problematic. It is not clear that those who investigate the causes of individual wars—let alone the Cause of War—agree (or even have their own consistent ideas, individually) on what 'causes' and 'wars' are.<sup>1</sup> Leaving aside the broader issues, and the broader, holistic attempts to address them—evolutionary psychology, memetics, *Realpolitik*, class struggle—in this essay I will concentrate on a narrower question: Are the decisions men and nations make to go to war rational decisions?

At first glance, the phenomenon of war appears to make a hash of the Chicago model of economic rationality, the pursuit of narrow self-interest. On the level of the individual soldier, we have Martin Van Creveld's oft-cited observation that "dead men have no interests"—that no one pursuing self-interest would place himself in danger of death on the battlefield.<sup>2</sup> On the level of the state, we have the somewhat more subtle argument, articulated by James Fearon and others, that a rational state should always prefer negotiation to confrontation.<sup>3</sup> Yet perfect

<sup>1</sup> Suganami 70, 114

<sup>2</sup> Van Creveld 158

<sup>3</sup> Fearon 383

economic rationality is, as Mark Twain said of perfect grammar, “the fourth dimension, so to speak; many have sought it, but none has found it.”<sup>4</sup> Between the Platonic ideal of rational economic man and the voluntarily bestial Norse berserker are a wide range of motivations and strategies. There is ample evidence in the literature that some, if not all, of the reasons men and nations go to war may be rational—as rational, at least, as their reasons for engaging in any other activity.

I have separated the state and the individual deliberately. *Going to war* is not the same thing as *going off to war*. The literature, however, often seems to confuse the two; and to make a very broad generalization, one tends to find that those who argue that war is rational mean that one state may have rational reasons to attack another, whereas those who argue that war is irrational mean that no man has rational reasons to risk death in battle. Neither argument is as clear-cut as it at first seems, but there is a grain of truth to both.

The idea of the state, the ‘unit spherical actor of uniform density’, has its problems, of course. But such a ‘billiard ball’ model, as James Fearon calls it, has a long history.<sup>5</sup> It goes back at least to Thucydides, who had no difficulty discussing the actions of ‘the Athenians’ and ‘the Lacedaemonians’ as if each had a single, indivisible will. The model helps us keep our theories small, manageable, and useful. And since it is so useful, it informs the decisions of the very individual decision-makers who undermine it by their actions.

#### WAR AND THE STATE

As the libertarian novelist Ken MacLeod has put it, “war is the state’s killer app.”<sup>6</sup> The argument that it is, or can be, rational for a state to go to war is relatively straightforward. It can be developed at length and strengthened with empirical research and formal theoretical analysis (e.g., Bruce Bueno de Mesquita’s work on expected utility in conflict decision-making)—the details of which may generate controversy without lessening the force of the overall argument—but at the core it is a simple cost-benefit analysis. As Michael Howard writes:

<sup>4</sup> Twain 2

<sup>5</sup> Fearon 410

<sup>6</sup> MacLeod 307

Whatever may be the underlying causes of international conflict... wars begin with conscious and reasoned decisions based on the calculation, made by *both* parties, that they can achieve more by going to war than by remaining at peace.<sup>7</sup>

Kenneth Waltz puts it more simply:

[A] state will use force to attain its goals if, after assessing the prospects for success, it values those goals more than it values the pleasures of peace.<sup>8</sup>

When diplomacy breaks down, in other words, a rational, expected-utility-maximizing state will go to war. There are various developments, embellishments, and special cases to cover limited war, defensive war, war as a communicative act rather than an instrumental one, but that is the essence of it. Doubtless there are wars that arise from irrational causes, in this analysis, but it is not necessary to assume irrationality to explain war. We can take rational war as a baseline and extrapolate from there.

This is quite persuasive; it accords with our intuitions and experience. Though we may not always agree with the numbers in specific cases, these are the sorts of arguments that—in industrialized democracies at least—invariably accompany deliberations over the use of force. The analysis is based on expected utility, it is well supported by the evidence, and it is even—to a certain extent, comparing the theory against the historical record—empirically verifiable. The behavior it describes is, broadly speaking, sane. The difficulty, from a theoretical perspective, is that it is not rational.

Diplomacy, among rational states, should not ‘break down’. Fearon articulates this quite clearly. Consider two states, *A* and *B*, where *A* is militarily the more powerful, and the presumed victor in any war between the two. Fearon shows that when the two sides are risk-averse or risk-neutral, there will always be room for negotiation—there will always be a set of outcomes in which the gain to *A* from negotiation is more than *A*’s *net* gain (figuring in the cost of conflict) from going to war, and the loss to *B* is less than *B*’s net loss.<sup>9</sup> In the simplest possible case, *B* could simply hand over to *A* the territory or other concessions that *A* would gain in the event of a war, and both sides will be ahead by whatever an actual war would have cost. Clausewitz’ dictum that “war is the province of chance” does nothing to alter this scenario; given the (known) relative probability of victory for each side, and the payoffs for victory and loss, the calculation of the tribute-in-lieu-of-war should be straightforward.

<sup>7</sup> Howard 22

<sup>8</sup> Waltz 160

<sup>9</sup> Fearon 388

The question, then, is why there still exist disagreements that end in conflict rather than negotiation. For that matter, one cannot help but wonder why, under the circumstances, states engage in any sort of military spending at all. Would it not be sufficient for potential adversaries to understand, and include in their calculations, what forces the state *could* assemble in the event it resolved to do so? However complex the world, fully rational actors given the same information should come to the same conclusions about their relative probabilities of victory in the event of a hypothetical conflict. It is quite clear, however, that in many conflicts this has not been the case—we do not need to infer this from the results (i.e., failures to successfully negotiate), we can simply examine the diplomatic, military, and intelligence records to see that the actors neither had the same information nor reached the same conclusions.

The simplest explanation, without abandoning the unitary actor model, is that the relative probabilities and payoffs are *not* known, or rather not agreed upon—that *A* and *B* have different estimates, which may or may not conform to reality, and therefore conflicting expectations. In fact this is taken as a given in many if not most analyses. Bueno de Mesquita, for instance, writes that one of the benefits of the expected-utility model he presents in “The War Trap Revisited” is that it makes it possible “to calculate the effects of differing perceptions on conflict decision making.”<sup>10</sup> Nazli Choucri and Robert North write, “leaders’ perceptions of their nations’ capabilities (accurate or inaccurate as the case may be) are equally, or perhaps even more, critical than... demonstrable reality.”<sup>11</sup>

For these differences in perception we could give several complementary explanations: that the world is too complex for the actors to gather all available information, that war is too variable and too sensitively dependent on initial conditions to allow accurate prediction (the ‘for want of a nail’ or, both more formally and more radically, chaos-theoretical approach), that leaders misinterpret the information available to them due to preconceived notions and misplaced optimism. As Fearon points out, however, such explanations are at best based on bounded rationality.<sup>12</sup> To accept them is as much as to admit that we have reached the limit of strictly rational explanation. While acknowledging that in the real world bounded rationality and even irrationality may be as good or

<sup>10</sup> Bueno de Mesquita 157

<sup>11</sup> Choucri and North 83

<sup>12</sup> Fearon 393

even better than strict rationality as tools to describe the decision-making processes of states in conflict, Fearon argues that we do not have to abandon strict rationality just yet. The rational argument that negotiation will be preferred to war has two components: the parties must agree on the likely outcome of a hypothetical conflict, and they must be able to conclude a settlement in order to avoid the cost of conflict. Fearon finds potential obstacles to both.

For the first, even without resorting to irrationality of decision-makers or inaccuracy of information, we have one clear source of divergent perceptions, and hence of conflicting expectations: Each side possesses private information about its own capability to wage war (and so 'costs') and willingness to wage war (and so 'benefits'). While there is an incentive to pool this information, allowing the two sides to refine their probability estimates to something like accuracy or at least agreement, there is an even stronger incentive to continue to conceal and even misrepresent it in order to gain advantages in bargaining.<sup>13</sup>

For the second, there is the simple but intractable problem that it is very difficult—in some cases, impossible—for states to commit to binding agreements. In a situation where two states are equally matched, but the side that strikes first would gain an overwhelming advantage, neither can be trusted not to renege and “shoot the other in the back.” Where the states are not equally matched but there is a strong possibility that the weaker will increase in relative strength and come to dominate in the future, the stronger cannot trust any commitment the weaker might make to future good behavior. And regardless of relative power, states may be unable to agree on negotiated 'tribute' when the concessions made in lieu of war would change the balance of power and lead to further demands.<sup>14</sup>

It appears, therefore, that a state, as a rational actor, can decide to go to war. The cost-benefit model does hold up under close examination. This is a somewhat disheartening result for those who hope to prevent further wars; and it may be ammunition, so to speak, in the hands of those who argue that the interests of the state are incompatible with those of the individual. We will see in the next section to what extent war can be in the interests of the individual.

<sup>13</sup> Fearon 395

<sup>14</sup> Fearon 402-408

## WAR AND THE INDIVIDUAL

Whereas our baseline assumption in the case of the state, effectively, is that a rational cost-benefit calculation can favor war, in the case of the individual the parallel calculation simply will not hold up. War “does not begin,” writes Van Creveld, “when some people kill others; instead, it starts at the point where they themselves risk being killed in return.”<sup>15</sup> This is not just hair-splitting; war is presented, packaged, and sold to the prospective warrior as an act of sacrifice, not of killing. Barbara Ehrenreich writes, “In the rhetoric of religious militarism, killing the enemy [is] almost an incidental outcome of war compared to making ‘the supreme sacrifice’ of one’s own life.”<sup>16</sup>

A state may accept the probability of defeat as it might any other gamble. In most wars what is at risk is a certain amount of territory, wealth, influence, or prestige, not the survival of the state itself. (Howard disagrees, quoting Raymond Aron to the effect that “the stakes of war are the existence, the creation, or the elimination of states.”<sup>17</sup> I am not sure which wars Howard and Aron include in their considerations—or rather which they exclude. If the existence, creation, and elimination of states has been a feature of most of the European wars of the last two centuries, the major combatants, with the possible exceptions of Turkey and Austria-Hungary, seem nonetheless to have been able to survive both victory and defeat, though not without changes in their governments and borders.) For the individual, it is a different matter; it is only in this century that advances in medicine have outstripped the intensification of the hazards of war, so that soldiers have been able to reasonably expect to survive a wound.<sup>18</sup> Only recently have men, like nations, become capable of suffering incremental losses in wartime. This is the logic underlying Van Creveld’s “dead men have no interests.”

The axiom defining risk-neutrality, that a 50% chance of a future profit (or loss)  $x$  is equal in value to an up-front profit (or loss) of  $x/2$ , cannot be made to work when the loss in question is death. Not only is death, as a loss, both infinite and indivisible; by changing the situation from an open-ended game to a closed-ended one, the risk of death attacks the mathematical foundations of the probability calculation.\* Consider a

<sup>15</sup> Van Creveld 159

<sup>16</sup> Ehrenreich 18

<sup>17</sup> Howard 14

<sup>18</sup> Keegan 270

\* A valid objection to this line of thinking is that, because death is inevitable in any case, what one risks is not death *per se*, but an *untimely* death. One could argue that the loss is not, whatever the poets may say, infinitely precious, but rather, valuable in

coin-tossing game like that in Tom Stoppard's play *Rosencrantz and Guildenstern are Dead*, where two players toss coins repeatedly, one player receiving those that come up 'heads' and the other receiving those that come up 'tails'. A risk-neutral player places equal value on a guaranteed payoff of 50p or a 50% chance of £1 because in the long run, over many tosses of the coin, the coin will come up 'heads' as often as it comes up 'tails' and the total payoff will be the same. When a result of 'tails' means death, however, the sequence of tosses ends there—there will be no opportunity for the coin to balance things out by coming up heads in the next toss. Probability is defined as long-run relative frequency.<sup>19</sup> When death is in the stakes, there is no 'long run'.

And of course there is historical evidence that men will go to great lengths to avoid war. But then there is also evidence that men will go to great lengths to serve. The enthusiasm displayed by the Kitchener volunteers cannot be explained entirely in terms of coercion, even the relatively benign 'moral suasion' of recruitment posters and white feathers. Obviously there is a certain amount of coercion involved, both in inducing men to enlist and in ensuring that, once they have enlisted, they are not able to unilaterally terminate their enlistment. But the weight of any non-lethal penalty should be small when set against the possibility of death in battle. If we are to explain the behavior of men in wartime we must look to something more than simple cost-benefit analysis.

Under the 'discounted utility' model people tend to prefer a smaller immediate payoff over a larger one at some point in the future; roughly speaking it is a formal version of the aphorism that a bird in the hand is worth two in the bush (assuming, of course, that one expects to be able to catch the two in the bush if one makes the effort). This alone might go some distance toward explaining why men are willing to enlist: the decision to do so is nearly always taken well in advance of exposure to the risks of battle. Particularly in peacetime, the prospect of actual war may be so far off as to seem not worth considering.

In such circumstances the risk of death may not even be a factor in the decision to enlist; with this factor removed from consideration, ordinary, strictly rational, short-term motivations may take over. Describing the British army's pre-1914 'regulars' on the eve of the First World War, John

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proportion to the net present value of one's natural life expectancy. This argument did not occur to me until some years after this essay was written. However, I think the probabilistic argument is still worth considering, even taking into account that the game was closed-ended to begin with. (January, 2003.)

<sup>19</sup> Wonnacott and Wonnacott 71

Keegan writes: “the impulsion which drove a pre-war civilian to join up... was most often that of simple poverty.”<sup>20</sup> Of Henry V’s archers at Agincourt—professionals and commoners, unlike the knights and men-at-arms—he writes: “many had enlisted in the first place to avoid punishment for civil acts of violence, including murder.”<sup>21</sup> Guy Sajer, son of a French father and a German mother, was given little choice about joining the German army after the fall of France in 1940; on being ‘liberated’ by Allied troops in 1945, he enlisted in the French army—which in any case, by this point, held no terrors compared to what he had seen and suffered on the Russian front—in order to, in the words of the French officer who suggested this course to him, “return to normal life in good order.”<sup>22</sup>

This is not to say that all those who enlist are motivated by narrow self-interest—again, consider the example of the Kitchener battalions. The observed phenomenon of ‘myopia’ or ‘hyperbolic discounting’ may be of particular relevance here. In this revision of the discounted utility model people may prefer one bird today to two birds tomorrow, but when offered the choice of one bird next Thursday or two birds next Friday, choose the two birds. The actual order of preferences changes over time. George Ainslie observes that this can give people an incentive to make long-term decisions that will restrict their short-term decision making—knowing that if one waits till Thursday to decide one will choose the single bird, it is best to choose to commit now to waiting until Friday for the two birds.<sup>23</sup> Hyperbolic discounting gives an explanation of how apparently nebulous motives like patriotic enthusiasm (or its flip side, the shame attached to cowardice) can hold up against the absolute cost of death. Knowing, or fearing, that when under fire he would if possible choose not to be on the battlefield, a patriotic man may, well in advance of combat, deliberately place himself in a position where he will have no choice but to fight.

Once in contact with the enemy, of course, the soldier faces a different situation from that of the civilian deciding to enlist, a different set of short-term cost-benefit calculations. At this point, however, his options become quite constrained, both by his own army and by the enemy. The British army in the First World War, like many in history, was forced to detail a certain proportion of men as ‘battle police’ to prevent the others

<sup>20</sup> Keegan 216

<sup>21</sup> Keegan 110

<sup>22</sup> Sajer 459

<sup>23</sup> Ainslie 339

from deserting.<sup>24</sup> According to Sajer, the German military police were only a factor behind the lines; the German army on the Eastern front appears to have been content to leave the policing to the hostile Russian troops, partisans, countryside, and weather. In either case, as Keegan says of the French men-at-arms at Agincourt, the soldier can be “drawn into the battle with all the free-will of a man who finds himself going the wrong way on a moving-staircase.”<sup>25</sup>

Yet while the soldier in battle may not be able to demobilize himself, he nonetheless has some range of choices. Armies given the opportunity to retreat do not invariably do so; if they did, there would be nothing to retreat from. The history of warfare is full of actions of both individual and group self-sacrifice of a sort that could not have been compelled—indeed, the very idea of compulsory self-sacrifice is a contradiction in terms. Can such behavior be construed as rational? An argument encountered in biology is that self-sacrifice can be ‘rational’, from a genetic or evolutionary perspective, when it increases the chance of survival of near relatives carrying similar genes. This is a far cry from simple self-interest. Van Creveld goes so far as to say that it “inverts the meaning of the term”, turning it “into a caricature of itself.”<sup>26</sup> But it is an undeniable component of human behavior, and it is at least quantifiable and internally consistent. As Ehrenreich points out, though, it is hard to see how such an argument could be extended from family or tribe “to the mass, genetically polyglot armies of both ancient and modern states.”<sup>27</sup>

Obviously, even allowing for modifications like myopia, we are not dealing here with strict rationality, where costs and benefits can be measured in dollars. We must fall back on more complex models of expected utility, the maximization of regard and the minimization of regret. If the hyperbolic discount curve is steep enough, particularly on a modern battlefield where the risk of death for the hero may not seem significantly greater than that for the coward, a preference for honor, or a desire not to let one’s comrades down, may take precedence over an aversion to death. This is not Chicago rationality, but given the appropriate utility and discount functions, it is rational.

<sup>24</sup> Keegan 277

<sup>25</sup> Keegan 115

<sup>26</sup> Van Creveld 158

<sup>27</sup> Ehrenreich 19

## CONCLUSIONS

When we investigate the causes of war, we are attempting to reconcile a paradox: the understandable reluctance of the individual citizen to accept the risk of death, set against the apparent willingness of the state to accept the certain death of some number of its citizens. In a sense we are looking at the mirror image of the classic problem of cooperation, namely how it is that a society composed of self-interested individuals can still combine to produce a collective good. In war, we are faced with the question of how a society composed of self-interested individuals can combine to produce individual evils.

Fearon accepts that not all human behavior is rational, and that therefore it is not reasonable to expect all war to be rational. Van Creveld, in fact, decries the perfect rational actor as “an inhuman monster.”<sup>28</sup> As Fearon points out, however, even if we accept the existence of irrational behavior, it is nonetheless useful to have rationality as a baseline; and he provides that baseline for the study of war.<sup>29</sup>

The difficulty with war is that it requires us to dilute our concept of what ‘rational’ is. In the case of the state, we are required at least to abandon the assumption of perfect information. In the case of the individual, we are required, at minimum, to posit a definition of utility that cannot be translated into dollars, and perhaps to reexamine expected utility itself. Such modifications have been standard practice in the social science for decades now. But where do we draw the line? Is there not a risk that by eroding ‘rationality’, we risk losing it altogether? If all behavior can be rational, given appropriate constraints and depending on what the actors are maximizing, does the term have any meaning? For ‘rationality’ and ‘irrationality’ to have meaning, there must be a difference between them—and they must each, at different times, describe real states of the world.

‘As they say, “If you would seek war, prepare for war.”’

‘I believe, my lord, the saying is “If you would seek peace, prepare for war,”’ Leonard ventured.

Vetinari put his head on one side and his lips moved as he repeated the phrase to himself. Finally he said, ‘No, no, I just don’t see that one at all.’

—Terry Pratchett, *Jingo*

<sup>28</sup> Van Creveld 157

<sup>29</sup> Fearon 409

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