

# War and Peace in the Middle East

Lecture by  
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My dear friends: What I am planning to do this morning is to present to you—more or less—the lecture I presented in Stockholm on December 8<sup>th</sup> 2005. Every Nobel Laureate must present a scientific lecture; my lecture was called “War and Peace.” People are aware—also in Sweden—that I come from Israel, and they thought that maybe I would talk about the Middle East. So I said right in the beginning that I was not going to talk about the Middle East, I was going to talk about war and peace in general. This morning I thought I *would* talk about the Middle East a little. Dr. Fried and I discussed the title of my speech and we decided to call it “War and Peace in the Middle East.” The basic outline is the same speech I gave in Stockholm—only with a discussion of a particular example, namely the Middle East. If you want to see the original lecture, you can see it on the Web at [www.nobelprize.org](http://www.nobelprize.org). You can surf to the 2005 Economics prize and you will find it there. So here goes.

“Wars and other conflicts are among the main sources of human misery.” Thus begins the *Advance Information* announcement of the 2005 Bank of Sweden Prize in Economic Sciences in Memory of Alfred Nobel, awarded for Game Theory Analysis of Conflict and Cooperation. The first word there is “war,” the first word in the announcement. So it is appropriate to devote this lecture to one of the most pressing and profound issues that confront humanity, that of war and peace.

I would like to suggest that we should perhaps change direction in our efforts to bring about world peace. Up to now all the effort has been put into resolving specific conflicts: India-Pakistan, North-South Ireland, various African wars, Balkan Wars, Russia-Chechnya, Israel-Arab, etc., etc. I would like to suggest that we should shift emphasis and study war in general.

Let me make a comparison. There are two approaches to cancer. One is clinical. You have, say, G-d forbid, breast cancer. What should you do? Surgery? Radiation? Chemotherapy? How much radiation? Which chemotherapy? The answers are based on clinical tests, simply on what works best. You treat each case on its own, using your best information. And your aim is to cure the disease, or to ameliorate it, in the specific patient before you.

And, there is another approach. You don't do surgery, you don't do radiation, you don't do chemotherapy, you don't look at statistics, you don't look at the patient at all. There is no patient. You just try to understand what happens in a cancerous cell. Does it have anything to do with the DNA? What is the process like? What happens? *Don't* try to cure it. Just try to understand it. You work with mice, not people. You try to make them sick, not cure them.

Louis Pasteur was a physician. It was important to him to treat people, to cure them. But Robert Koch was not a physician; he did not try to cure people. He just wanted to know how infectious disease works. And eventually, his work became tremendously important in treating and curing infectious disease.

War has been with us ever since the dawn of civilization. Nothing has been more constant in history than war. It is a phenomenon, not a series of isolated events. The efforts to resolve specific conflicts are certainly laudable, and sometimes they really bear fruit. But, there is also another way of going about it, perhaps more effective: studying war as a general phenomenon, studying its general defining characteristics, what the common denominators are, what the differences are. Historically, sociologically, psychologically and—yes—rationally. Why does *homo economicus*—rational man—go to war?

What do I mean by “rationality”? It is this:

*A person’s behavior is **rational** if it is in **his** best interests given **his** information.*

If it advances his goals, then I call it rational.

With this definition, can war be rational? Unfortunately, the answer is yes; it can be. In one of the greatest speeches of all time—his second inaugural—Abraham Lincoln said, “Both parties deprecated war; but one would make war rather than let the nation survive, and the other would accept war rather than let it perish. And the war came.”

It is a big mistake to say that war is irrational. We take all the ills of the world—wars, strikes, racial discrimination—and dismiss them by calling them irrational. They are not irrational. Though it hurts, they may be and often are rational. If war is rational, once we understand that it is, we can at least somehow address the problem. If we simply dismiss it as irrational, we cannot address the problem.

Many years ago, I was present at a meeting of students of Yale University. James Tobin, who later was awarded the Nobel Prize in Economics, was also there. The discussion was freewheeling, and one question that came up was: Can one sum up economics in one word? Tobin’s answer was “yes”; the word is *incentives*—motivation. Economics is all about incentives.

So, what I’d like to do is an economic analysis of war. Now this does *not* mean what it sounds like. I’m not talking about how to finance a war, or how to rebuild after a war, or anything like that. I’m talking about the incentives that lead to war, and about building incentives that prevent war.

Let me give an example. Economics teaches us that things are not always as they appear. For example, suppose you want to raise revenue from taxes. To do that, obviously you should raise the tax rates, right? No, wrong. You might want to *lower* the tax rates. To give people an incentive to work, or to reduce avoidance and evasion, or to heat up the

economy, or for many other reasons. That's just one example; there are thousands like it. An economy is a game: the incentives of the players interact in complex ways, and lead to surprising, often counterintuitive results. But as it turns out, the economy and the world really work that way.

So now, let's analyze war. An example, in the spirit of the previous item, is this. You want to prevent war. To do that, obviously you should disarm, lower the level of armaments. Right? No, wrong. You might want to do the exact opposite. In the long years of the cold war between the United States and the Soviet Union, what prevented "hot" war was that bombers carrying nuclear weapons were in the air 24 hours a day, 365 days a year. Disarming would have led to war.

The bottom line is—again—that we should start studying war, from all viewpoints, for its own sake. Try to understand what makes it happen. *That* may lead, eventually, to peace. The piecemeal, case-based approach has not worked too well up to now.

And now I would like to discuss some of my own basic contributions, some of those that were cited by the Prize Committee. Specifically, repeated games, and how they relate to war, and to other conflicts, like strikes, and indeed to all interactive situations.

Repeated games model long-term interaction. The theory of repeated games is able to account for phenomena such as altruism, cooperation, trust, loyalty, revenge, threats (even self-destructive threats)—phenomena that may at first seem irrational—in terms of the definition of rationality that we stated a few minutes ago. Namely, that rational behavior means self-interested behavior—behavior that is calculated to achieve your goals and has a good chance of doing so. The fundamental insight is that repetition—long-term interaction—enables cooperation, and indeed fosters cooperation. If you interact with another party again and again, day in day out, year in year out—you are much more liable to develop cooperative modes of behavior than if you interact on a one-time basis.

Actually, this is pretty obvious. If I had been on the Prize Committee, I would have been opposed to giving the prize to the guy who thought this up. Fortunately, I was not on the Committee.

Suppose somebody comes to your door and wants to sell you brushes. And suppose that he is not the Fuller Brush man. You will think twice about buying those brushes from him. Why? Well, clearly it's because you will never see him again. What happens if he sells you shoddy merchandise? There is nothing you can do about it.

But if he *is* the Fuller Brush man, that's a different story. The Fuller Brush man has a reputation to uphold. If he sells you shoddy merchandise, you won't buy from him again. And you will tell all your neighbors, and *they* won't buy from him. And the Fuller Brush Company will go out of business pretty soon. So they are motivated to sell you good merchandise, and you are motivated to buy from them. They have incentives to cooperate with you, and you have incentives to cooperate with them. And what is creating those

incentives is something that doesn't sound very nice, but it is G-d's honest truth. What is creating the cooperation is the threat of punishment—that you won't go to him again. He's not going to sell you shoddy merchandise if you have a long-term interaction—if he's around, if he's identifiable, if he opens a store. The threat of punishment is what is creating the cooperation. That doesn't sound very nice but that is the truth. What enables cooperation is punishment—not actual punishment but potential punishment.

In brief, long-term interaction fosters cooperation because the benefits accruing from long-term repeated cooperative behavior exceed the gains from one-time selfish behavior—selfish behavior that will be punished if it is carried out. That's the basic story, that's why they gave me the Nobel Prize.

There is a caveat that is needed to make this work. And the caveat is what we call in technical language a low interest rate or a low discount rate. In less technical language, it's that the players must not be too impatient. They must be patient. They must be interested mainly in the future, because it is the future that makes this mechanism work. It is the threat of *future* punishment that makes people cooperate *now*. If you are impatient, then the future is less important to you, and the whole mechanism that leads to this cooperation breaks down. If you insist on peace now, you may never get peace. But if you are willing to wait, then you may get peace *now*.

This is one of those apparent contradictions that are characteristic of much of economic theory and indeed of science in general. Shortly before coming to Stockholm to receive the Prize, I learned that global warming may lead to a cooling of Europe, because it may shift the direction of the Gulf Stream; and as we all know, it is the Gulf Stream that keeps Europe moderately warm. Global warming may lead to a cooler Europe. Raising tax rates may lead to lower tax revenues. Disarming may lead to war. Wanting peace now may lead to your never getting peace.

Dear friends, our Arab cousins do not suffer from impatience. Already fifty years ago, when I came to Israel, they were saying that they have time. The Crusaders, they said, came and went, the Jews came and they too will go. We have time, they said; we can wait. Whatever it takes: 50 years, 100 years, whatever. They are still saying that.

But we Jews are in a hurry; we have ants in our pants. We can't wait. We want peace now and we broadcast it loudly and clearly. So we run around in a frenzy. We expel thousands of our own people from their homes—an unprecedented act of barbarism, of inhumanity, of self-hatred, of stupidity, of venality. We fall all over ourselves with anxiety, with guilt, with self-hatred. We want peace now—so we will never get it. We have had war in the Middle East for 85 years. The way we are going, the war in the Middle East will continue for another 85 years, and beyond that. We will fight—our children will fight—our grand- and great-grandchildren will fight.

There is one and only one way to achieve peace in the Middle East; namely, to convince our Arab cousins that we are not the Crusaders. We are here to stay [Applause.] There is absolutely no reason why our Arab cousins cannot live peacefully side by side with us.

But for that, they must be convinced that we will not move. That like them, we have time. Whatever it takes, but we will not move.

Ladies and gentlemen, the inhumane, barbaric expulsion of the Jews from Gush Katif two and a half years ago led directly to the Second Lebanon War a year later, and to the bombardment of Sderot. And it set back the achievement of peace by at least 10 or 15 years—probably more. That is irreparable. It cannot be changed now. But if we do want peace down the road, in 10 or 20 years, then we had better make an about-face now—a 180-degree change in policy. And not only in government policy, but in our attitude, the attitude of the people of Israel.

Let me explain. The Shahidim—the suicide bombers—are often called fanatics, madmen, totally irrational. So we are back to what I said fifteen minutes ago, at the beginning of this talk. We take all the ills of the world and we dismiss them by calling them irrational. Ladies and gentlemen, the Shahidim are not irrational. They are highly motivated, highly rational people. If we dismiss them as irrational, we can't address the problem.

What makes them rational? What motivates them? It's us. We motivate them. Remember the definition of rationality back at the beginning of the talk? We defined rationality as self-interested behavior—behavior that is calculated to achieve a desired goal and has a reasonable chance of achieving that goal. Well, the goal of the Shahidim is to get us out of there—out of Gush Katif, out of Judea and Samaria, out of Jerusalem, out of Haifa, and out of Tel Aviv.

That is what they want. It is not what *we* want, but that doesn't make *them* irrational. If anything, it makes *us* irrational. It's what they want. They think they can get it by blowing themselves up—and they're right. They are getting it. They're getting it by blowing themselves up—and blowing us up. The expulsion of the Jews from Gush Katif was the direct result of the Shahidim. It was directly motivated by that. That's why our government did it. And let me say this, it's not only our government, it's also our people. I'm not blaming the government; I'm blaming us. The government was reelected. It got a tremendous vote of confidence two years ago, in March of 06. The threatened expulsion from Judea and Samaria, which was implicitly approved by the electorate at that time, is threatened by us, not by them. That, too, if G-d forbid it materializes, will be the direct result of the Shahidim's activities. We are encouraging them—we are saying to them, go for it, boys and girls. Go for it, blow yourselves up and blow us up, kill us, and then we will capitulate. We will give you what you want. We are motivating them. And they're smart, they're idealistic—not *our* ideals, *their* ideals. And they catch on fast. So it is entirely up to us.

As a nation, we lack one cardinal quality. Our Arab cousins have this quality, and I admire and envy them for it. The quality is perseverance—perseverance and persistence and determination.

That, my friends, is what we are lacking. We have lost heart, we have lost direction, we have lost purpose, we have lost drive. And it is coming through loud and clear to the whole world, and to our cousins, and to the Shahidim.

I started my words this morning by quoting Lincoln's second inaugural. Let me now paraphrase his first inaugural. Talking to the South in his first inaugural, Lincoln said, "In your hands, my dissatisfied fellow countrymen, is the momentous issue of Civil War." So I say: In our hands, my impatient fellow countrymen, is the momentous issue of war and peace in the Middle East. If we persevere, if we make it clear to our cousins, that we wish dearly to live in peace with them, but that no amount of violence can budge us even one inch, then we will eventually have peace; but only then. If we continue with the policy of appeasement and capitulation, then the violence—the war—will continue and escalate.

Ladies and gentlemen, the Jewish nation will survive no matter what. But I am less sure about the state of Israel. It is totally, totally in our hands. We must wake up before it is too late.