Stephen Van Evera

THE "SPIRAL MODEL" vs. THE "DETERRENCE MODEL"1

When are threats of punishment ("sticks") the best way to gain other states' compliance, and when do positive inducements (promise of rewards, appeasement, "carrots") work best? Both policies sometimes succeed, but both can also make things worse. Sticks can provoke a hostile response, while carrots can lead the target to sense weakness, make more demands, and dismiss final warnings not to move further.

Sometimes either sticks or carrots will work, and sometimes neither will work. However, it often happens that one will work while the other will make things worse.² In these situations the choice between carrots and sticks is crucial, since that choice determines if policy will succeed or prove counterproductive.

I. DEFINING THE SPIRAL MODEL AND DETERRENCE MODEL

The spiral model and deterrence model are similar in kind and opposite in substance. Both models try to explain the outbreak of war. Both assign a central role to national misperception: specifically, both posit that states adopt war-causing policies in the false expectation that these policies will elicit compliance. However, they posit opposite misperceptions.

A. The **Spiral Model** posits that conflicts arise from punishment applied in the false expectation that it will elicit better behavior from the other side, when in fact it elicits worse behavior. Angered or frightened by the punishment, the other becomes more aggressive—adopting wider aims, and/or becoming more willing to use force to defend them. The first side responds with more punishment, assuming that its first punishment was too mild, the other grows still more belligerent, etc. In this way two sides divided by only minor differences can spiral into intense confrontation or war.

Prescription: Appeasement works better than threat of punishment. Carrots are safer than sticks. Peace is best preserved by conciliation.

B. The **Deterrence Model** posits that conflicts arise from acts of appeasement made in the false expectation that appeasement will elicit better behavior from the other side, when in fact it elicits

These models are outlined in Robert Jervis, Perception and Misperception in International Politics (Princeton: Princeton University Press, 1976), chapter 3 ("Deterrence, the Spiral Model, and Intentions of the Adversary,"), pp. 58-113. Jervis spoke only of "deterrence," not of a "deterrence model," but the set of concepts he defines as "deterrence" comprise a model, so I refer here to a "deterrence model."

Thus four situations are possible; (1) either carrots or sticks will work (i.e. either strategy will elicit better behavior from the other side); (2) neither carrots nor sticks will work (i.e. both strategies will elicit worse behavior); (3) carrots will work, while sticks will make things worse; and (4) sticks will work, while carrots will make things worse.

worse behavior. The other, believing that it coerced or frightened the appeaser to offer its concessions, assumes that more threats will elicit more concessions. Hence it makes additional demands, backed by threats. It also may dismiss the appeaser's threats after the appeaser changes course and adopts deterrence; as a result it may move too far and trigger war.

Prescription: Threat of punishment works better than appeasement. Sticks are safer than carrots. Peace is best preserved by unyielding policies.

Note: the spiral model incorporates one misperception—the punishing state falsely expects that punishment will elicit better behavior from the other, when it elicits worse behavior. The deterrence model incorporates two misperceptions—the appeasing state falsely expects that appeasement will elicit better behavior, when in fact it elicits worse behavior; and the appeased state then falsely expects the appeaser won't carry out its later threats when in fact it will.

II. CAUSES OF SPIRALS

Two major explanations for spirals have been offered:

- A. A psychological explanation: policymakers suffer the syndromes that cognitive psychology suggests individuals suffer, hence the states they govern exhibit these same syndromes. Specifically, states underestimate their own role in causing others' hostility, because (1) they engage in some wishful thinking about themselves, causing them to underestimate the aggressiveness of their own conduct; (2) they believe (following attribution theory) that their own aggressiveness was compelled by circumstances—specifically, by the other side's behavior; and (3) they further assume that the other side knows this. As a result they see the other's provoked hostility as unprovoked malice; the other side is in the wrong, knows it, is just testing to see if its bluff will be called, and will back down if its bluff is called.
- B. A nationalism explanation: states and societies paint rose-colored self-images in their schoolbooks and public discourse, largely to build patriotism and a spirit of civic self-sacrifice in the population. As a result they are unaware that they injured other societies in the past; hence they are unaware that others might have legitimate grievances against them, or might have legitimate fears of their future conduct based on their past behavior. Hence they view others complaints against them as unprovoked malice; the other side is in the wrong, knows it, is just testing to see if its bluff will be called, and will back down if its bluff is called.

III. WHEN DOES EACH MODEL APPLY?

When do carrots work better, and when do sticks work better?

These conditions can be important:

A. Is the other state an **aggressor** or a **status quo power**? In other words, does the other have large aims beyond those it now declares? If the other is an aggressor, it will usually know this, will assume you know it, and will infer weakness from any concessions.

But note: some aggressors don't know they are aggressors--neurotic

Wilhelmine states, who forget each past act of aggression as soon as they are done committing it. With these states appearement may be safer.

So there are two issues:

- 1. Is the other an aggressor or not?
- 2. Does the other see itself as an aggressor or not?

It is safest to apply sticks when the other is an aggressor and knows it; then it is really just probing to find out if you have divined its nefarious aims.

B. Are the other state's claims **legitimate** or **illegitimate**? The other will infer a wider weakness on your part if you concede to illegitimate than to legitimate claims, because concessions to illegitimate claims set a wider precedent.

Note: some states making illegitimate claims don't think their claims are illegitimate. With these states appeasement may be safer, and standing firm more dangerous.

So there are two issues:

- 1. Are the other's demands legitimate or not?
- 2. Does the other see its demands as legitimate or not?
- C. How strong is the other state? It is more dangerous to appease strong states, because they are more likely to infer that you conceded to their threats, not to the legitimacy of their claims. Weak states are less likely to make such an inference.
- D. Are the resources demanded **cumulative**, that is, additive? If so, you may be giving away assets that will change the other side's perspective—allowing it to redefine its aims, since it now could take what it could not take formerly. Its appetite will grow with the eating because its ability to eat will grow with the eating.

17.42 Causes and Prevention of War Spring 2009

For information about citing these materials or our Terms of Use, visit: http://ocw.mit.edu/terms.