

4. Credible Commitments

Consider the following statements from the media:

- “Continental Airlines said yesterday that it would raise airfares on about two-thirds of its routes ... to take effect September 5.”
New York Times, August 29, 1992.
- “Continental Airlines has dropped its plan to raise domestic airfares by 5%.”
USA-Today, 1992.
- “Microsoft officials won’t confirm or deny that its commitment to ACE with OS/2 3.0 was a bluff, but the [previous] announcement bought them about six months.”
UnixWorld, February 1992.
- “On January 5, Boeing, the world’s top aircraft maker, announced it was building a plane with 600 to 800 seats, the biggest and most expensive airliner ever. Some in the industry suggest Boeing’s move is a bluff to preempt Airbus from forging ahead with a similar plane.”
Business Week, 1993.

(From Dixit & Nalebuff, see Further Reading.)

All strategic moves court lack of *credibility*.

- If it is not in your interest to carry out a strategic move (unconditional move, threat, or promise), then your opponents will look forward and reason back to realise that you have *no incentive* to follow through.
- If your strategic move is not a credible commitment, then it will be ineffective in altering your opponents’ behaviour by changing their expectations about your responses to their actions.

Are you engaging in *tactical bluffing*?

If the opposition decides you are, then your efforts to convince otherwise will be in vain.

e.g. Rothschild’s selling on the London Exchange.

4.1 Eight-Fold Path to Credibility

Three underlying principles:

- I. to *change the payoffs* of the game (Items 1, 2, 6 below) — to make it in your interest to follow through on your commitment:
 - turn a threat \Rightarrow a warning,
 - turn a promise \Rightarrow an assurance.
- II. to *limit your ability* to back out of a commitment (3, 4, 5, 6) — three possibilities: deny yourself any opportunity to back down,
 - by cutting yourself off from the situation, or
 - by destroying any avenues of retreat, or even
 - by removing yourself from the decision-making position and leaving the outcome to chance.
- III. to *use others to help you maintain commitment* (7, 8) — a team may achieve credibility more easily than an individual.
 1. Reputation
 2. Contracts
 3. Cutting off communication
 4. Burning your bridges
 5. Leaving outcome beyond your control
 6. Moving in steps
 7. Teamwork
 8. Mandated negotiating agents

4.1.1 Reputation:

- In a once-in-a-lifetime situation, reputation may not matter (tourists, beware!)
- but in a repeated interaction with one player or parallel games with several players reputation may be valuable. (“Never negotiate with terrorists/Hamas/the IRA/etc.”)
 - Why?
 - Costly?
 - Alternatives?)
- Sometimes *destroying* your reputation can create the possibility for a commitment, by committing you *not* to take actions in the future that you can predict will not be in your best interests.
 - Despite a commitment never to negotiate with hijackers, what if the government reaches a negotiated settlement and then breaks this new commitment by attacking the hijackers?
 - with this action the government denies itself the ability to negotiate with hijackers in the future: how could hijackers ever be able to believe the government’s future promises?

- The destruction of the credibility of a promise makes credible the threat never to negotiate.
(Tax/immigration amnesties and perverse incentives, and side effects.)
- The player cultivates a reputation with the aim of creating credibility for her future unconditional commitments, threats, and promises.
- Pride in our word, our promises, is taught as an end in itself, but it also improves the credibility of our daily commitments.
- *Irrationality* may make credible the player's threats, however outrageous — Ghaddafi, Saddam Hossein, the Ayatolah Khomeini — what wouldn't an irrational player do if he were convinced in his own cause.

So, it may be rational to be irrational!

4.1.2 Contracts:

- Agreeing to punishment if you fail to follow through will make your commitments credible.
 - Pay the programmer a lump sum because it's the end of the financial year, even though the promised program is three months late?
 - No. The contract is the commitment device.
- But beware, contracts can be *renegotiated*,
- *so for the contracting approach to be successful, the party who enforces the action or collects the penalty must have some independent incentive to do so.*
- If breaking a contract produces damages, then renegotiating the contract is a less attractive option mutually, and may no longer be mutually attractive at all.
- Possible to write contracts with neutral parties as enforcers, who must be made to care about whether the commitment is kept.
- Contracts alone cannot overcome the credibility problem.

4.1.3 Cutting Off Communication

- Can make a decision truly irreversible.
 - Extreme form: last will and testament.
 - Posting a letter/receiving a letter.
 - Other examples?
- Problem: absence may reduce enforceability of the contract: trustees.

4.1.4 Burning Your Bridges (or Sinking Your Ships)

- Cortés' burnt ships had two effects:
 - his soldiers had no alternative but to fight,
 - the opposition could see that there was no easy out for the would-be conquistadores, while they could retreat inland, which they did. Importance of all participants seeing the bridges being burnt.
- Polaroid's undiversified business: instant photography. Successfully defended itself in court against Kodak's instant film and camera, but latterly has diversified as its competitive advantage is whittled away.
- Figuratively burning one's bridges with a particular group may increase one's credibility with other groups.
- Pulling down the Berlin Wall as a burnt bridge for Eastern Germany's reformist government.
- Other examples?

4.1.5 Leaving the Outcome beyond Your Control

- Dr Strangelove's doomsday device;
 - its automatic trigger was essential;
 - it made a good deterrent because it made aggressive action tantamount to suicide.
 - But a cost: what if the aggression is based on a mistake?
 - Cannot turn off the doomsday device's automatic retaliation.
- Want a threat no stronger than necessary to deter the rival.
- Schelling's *brinkmanship*:
 - establish a *risk*, but not a certainty, that retaliation will occur.
 - A risk cannot be ignored, even if it seems very unlikely. (U.S. versus the USSR in Europe, Cuban missile crisis.)

4.1.6 Moving in Steps

- Break the threat or promise into many, small pieces, and then each is dealt with separately, one after the other.
- Establishment of trust? Convert a once-off into a repeated game, in which reputation is important.
- Paying the builder.
- End-game strategies?

4.1.7 Teamwork

- Peer pressure in AA. Pride and self-respect are lost when commitments are broken — enough to drive one to drink?
- As well as social pressure, the army uses coercive desertion penalties as well as inculcation of love of country and loyalty to one's mates to induce commitment.
- Honour code at Stanford makes not only cheating an offence but also failing to report others who you know to have cheated; exams are not monitored.
- Accessories after the fact (=deed).

4.1.8 Mandated Negotiating Agents

- Buying a new car — “I’m on your side and I want the sale, let me ask the boss about the trade-in price”.
- One’s bargaining situation can be improved if one has an agent to negotiate on one’s behalf.
- A union leader may be less flexible because of his reputation. Or an agent may not have authority to compromise
- Should voluntary commitments subsequently abandoned be more severely regarded than abandonment of externally imposed commitments by the agent?

As we discuss in Theme F, however, using an agent can raise problems of divergence of interests — the Principal-Agent problem — which raises the issue of the appropriate *contract* between the principal and her agent.

4.2 Saint Crispin's Day

*O God of battles! steel my soldiers' hearts;
Possess them not with fear; take from them now
The sense of reckoning, if th'opposed numbers
Pluck their hearts from them ...*

*We few, we happy few, we band of brothers;
For he to-day that sheds his blood with me
Shall be my brother ...
And gentlemen in England now a-bed
Shall think themselves accurs'd they were not here
And hold their manhoods cheap whiles any speaks
That fought with us upon Saint Crispin's day.*

*That he which hath no stomach to this fight,
Let him depart; his passport shall be made,
And crowns for convoy put into his purse:
We would not die in that man's company
That fears his fellowship to die with us.*

Henry V, [IV, i and iii]

4.3 An Offer You Can't Refuse

- At the end of what appeared to be a successful job interview, Larry was asked where the firm ranked in his list of potential employers.
 - Before answering, he was told that the firm only hired those applicants who ranked it first.
 - If the firm was in fact his first choice, then they wanted him to accept in advance a job offer, should one be made.
 - With this prospect of an “offer you can't refuse” (because if you do then it's gone), what should Larry have done?
 - “We want you to work for us. If you rank us first, then we know we'll get you.”
 - “But if you rank us second, we might lose you.”
 - “To get you, even if we are not your first choice as an employer, we want you to agree in advance to accept our offer or you will get none at all.”
 - Credible?
- Committee decision making and take-it-or-leave-it credible threats.

4.4 Firms Compete Against Themselves?

- IBM emphasised short-term leases, rather than selling its mainframes.
 - In the customer's interests?
 - Well, obsolescence, flexibility, maintenance, financing.
 - But, otherwise computer prices fall over time — a durable good — and
 - IBM's customers wait to buy at lower prices, accelerating pressure for IBM to compete with itself by lowering prices faster.
 - Leasing commits IBM to keep prices high, since lowering its prices is much more costly since all will renegotiate lower leasing prices.
- Textbooks?
- Computer companies?
- Others?