

Phase 1. Demonstrate understanding of the dispute you have been given. **Provide a summary of your dispute episode and an initial reference list** that you will use for future research. This will include identification of key leaders in each country, a detailed description of the relative capabilities of each country, why either country could not (perhaps) use their full capabilities in this dispute, whether either country was a major power, the regime type of each country (using both the Polity Score and a more descriptive identification, identification of the alliance(s) between the countries if an alliance type is listed. Provide an analysis and discussion of the predicted outcome using the international interaction game and the ordinal preferences you have been given. (2-3 pages in at least eight paragraphs, not including one page for the international interaction game worksheet and another page for the works cited list.)

An explicit outline for Phase 1 is provided as a guide:

## Phase 1 Outline

### A. Opening

1. Name of dispute
2. Dates
3. Between what countries
4. Summary of "dispute information"
5. Where did the relevant events take place?

### B. State A

1. Regime type
2. Major-power status
3. Key decision-makers

### C. State B

1. Regime type
2. Major-power status
3. Key decision-makers

### D. Relative capabilities

1. Military personnel
2. Military expenditures
3. Energy consumption
4. Iron & steel production
5. Urban population
6. Total population
7. Percent of system capabilities

### E. Qualifiers to relative capabilities

F. Alliance between the two countries?

G. International interaction game

1. Predicted outcome

2. "Off the equilibrium path" decisions

H. Comparison of predicted outcome and actual outcome using the "hostility-level method"

Determining the actual outcome using the "hostility-level method":

		Highest Hostility Level for State B					
		0	1	2	3	4	5
Highest Hostility Level for State A	0	SQ					
	1		Nego		AcqA		
	2			Nego		CapA	
	3		AcqB		Nego		
	4			CapB			
	5					War	

A1: Given subgame perfect behavioral strategies, players choose the strategy with the greatest expected utility.

A2: The outcome of war is probabilistic, with  $P^i$  being player  $i$ 's subjective probability of gaining its demand, with  $A, B \in i$ .

A3: The initiator of force gains its demand with certainty only if the adversary chooses to capitulate rather than to retaliate. The capitulating state loses with certainty.

A4: All nations prefer to resolve their crises through negotiations rather than to reach the same resolution *after* bearing the heavy human, material, and political costs of war.

A5: Each outcome of the crisis subgame has potential benefits and/or costs associated with it. We decompose the costs into constituent parts such that  $\alpha, \tau, \gamma, \phi > 0$ ; and  $\tau > \alpha, \Gamma$ .  $\alpha$  is the cost in lost life and property associated with fighting *away* from one's home territory;  $\tau$  is the cost in life and property of fighting at home as the *target* of an attack;  $\gamma$  is the cost in life and property from a first strike to which the attacked party *gives in*; and  $\phi$  is the domestic political cost (separate from lost life and property) associated with using *force*.

A6: The utility from gaining one's demands exceeds the utility from keeping the status quo, which in turn exceeds the utility from losing by acceding to an adversary's demands:  $G > Q > L > 0$ .

## Nation $i$ 's Preferences for Outcomes

Outcome	Ordinal restriction on ordering	Possible preference rank
Acq <sub>j</sub>	> all other outcomes	8
Nego	> Acq <sub>i</sub> , Cap <sub>i</sub> , War <sub>i</sub> , War <sub>j</sub>	7 to 5
SQ	> Acq <sub>i</sub> , Cap <sub>i</sub>	7 to 3
Cap <sub>j</sub>	> War <sub>i</sub> , War <sub>j</sub>	7 to 3
Acq <sub>i</sub>	> Cap <sub>i</sub>	5 to 2
War <sub>i</sub>	> War <sub>j</sub>	5 to 2
Cap <sub>i</sub>		4 to 1
War <sub>j</sub>		4 to 1

Adapted from Table 2.3, Bueno de Mesquita and Lalman, 1992, *War and Reason*.

$i$  can mean either state A or state B.

When you are thinking about state A's preferences,  $i = A$  and  $j = B$ .

When you are thinking about state B's preferences,  $i = B$  and  $j = A$ .

# The International Interaction Game

Bueno de Mesquita and Lalman, 1992, *War and Reason*.

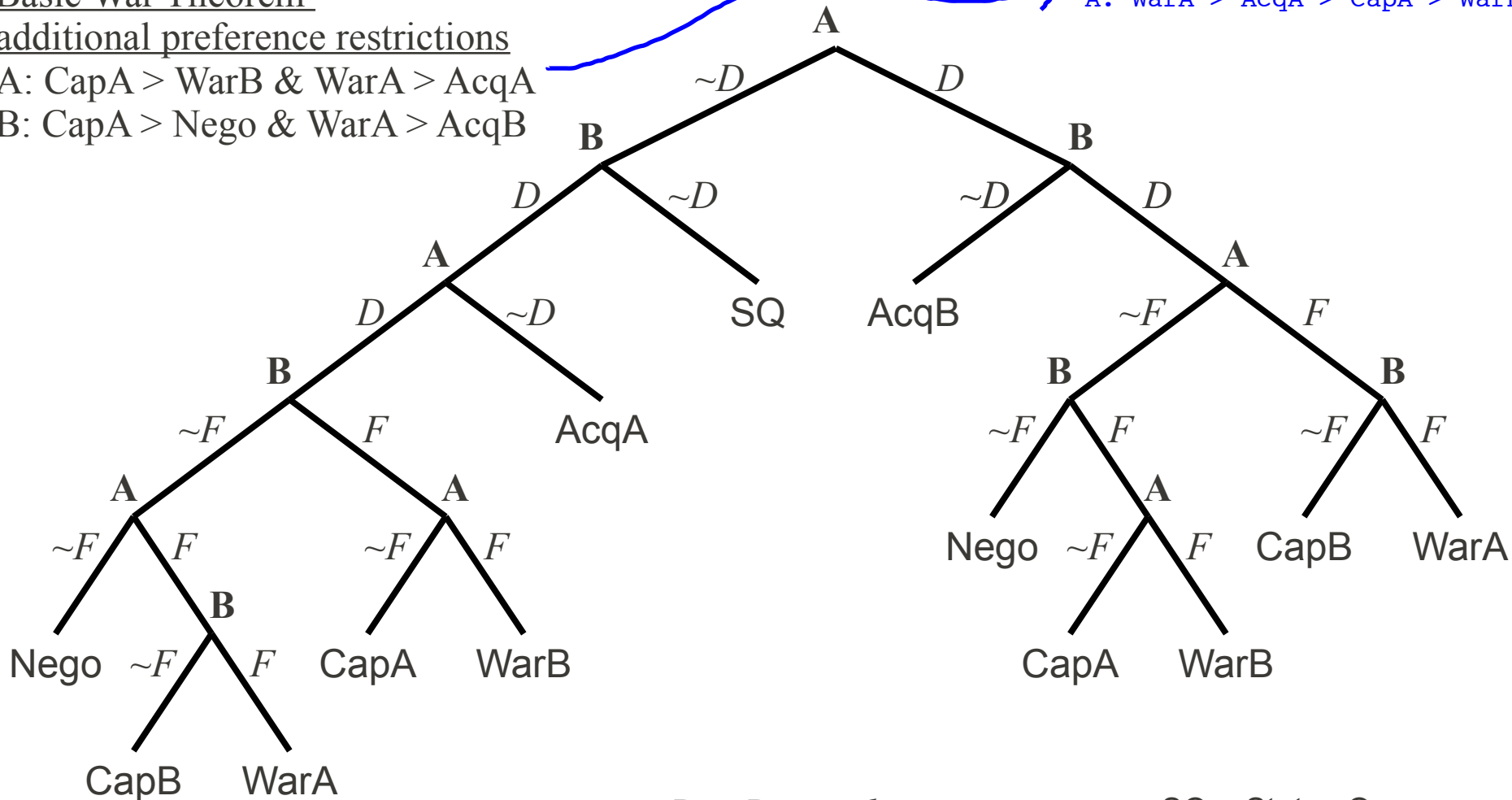
## Basic War Theorem

additional preference restrictions

A:  $CapA > WarB$  &  $WarA > AcqA$

B:  $CapA > Nego$  &  $WarA > AcqB$

Therefore,  
A:  $WarA > AcqA > CapA > WarB$



*D = Demand*  
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*F = use Force*  
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*SQ = Status Quo*  
*Nego = Negotiation*  
*AcqA = Acquiescence by A*  
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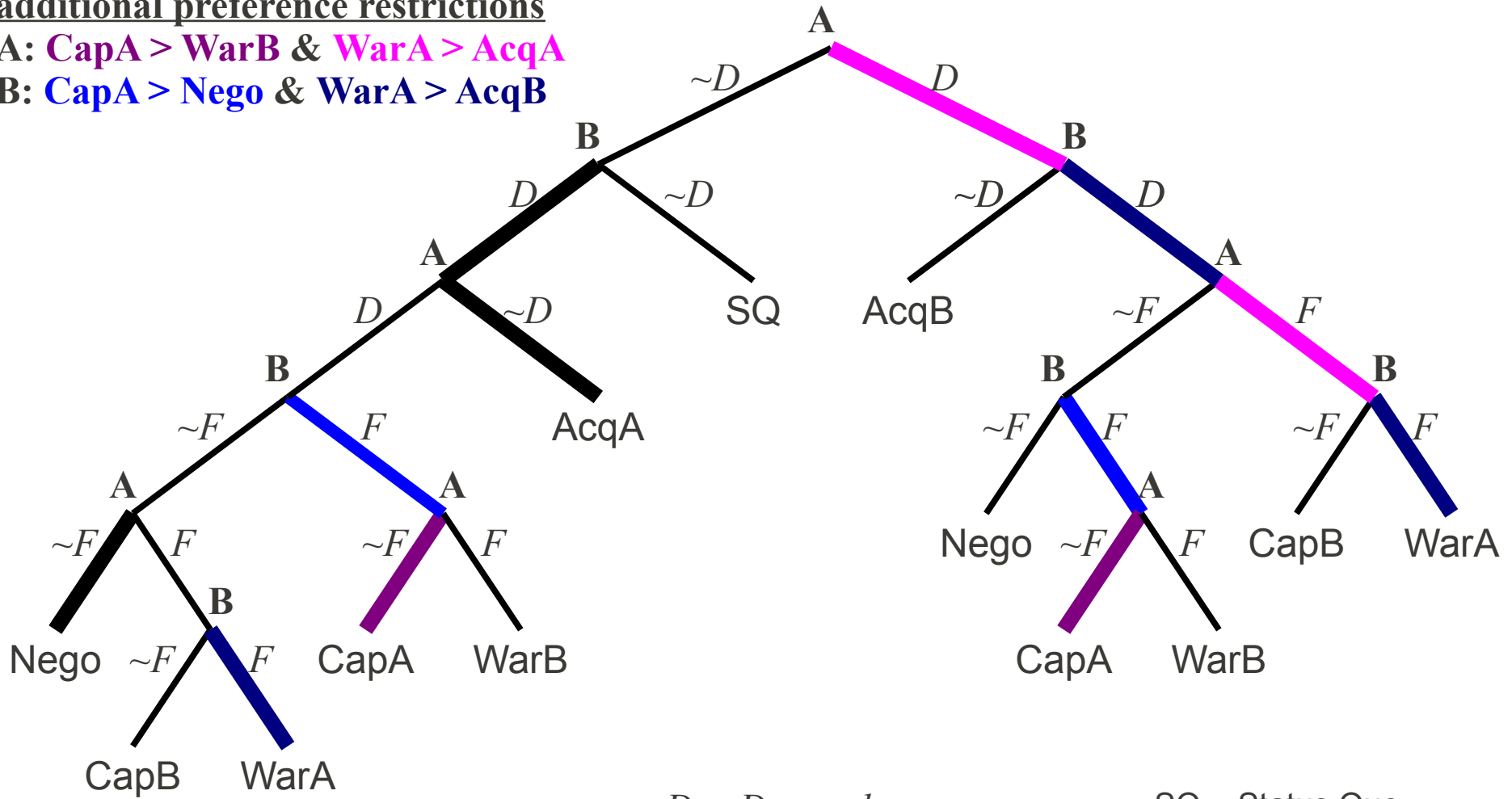
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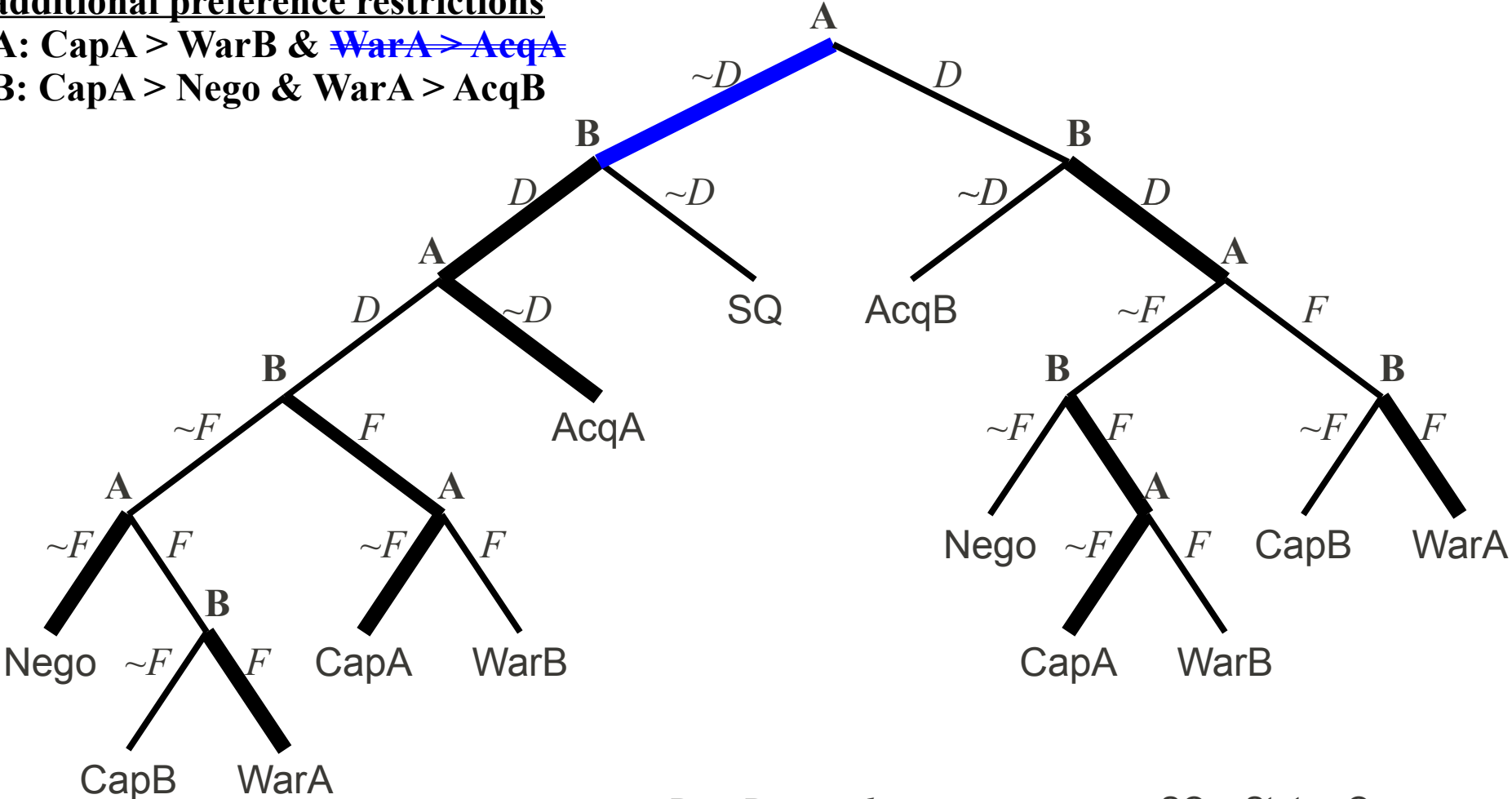
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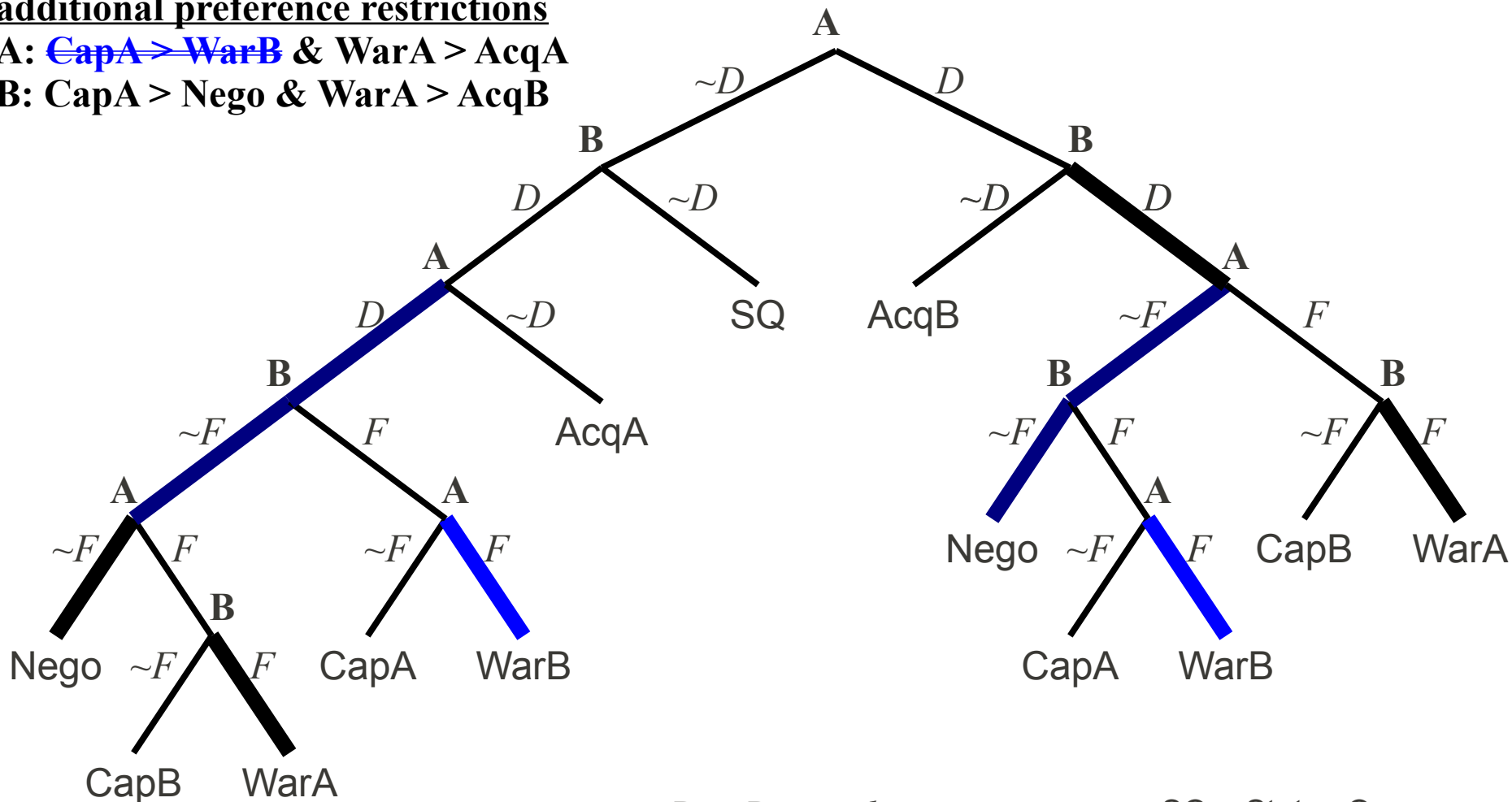
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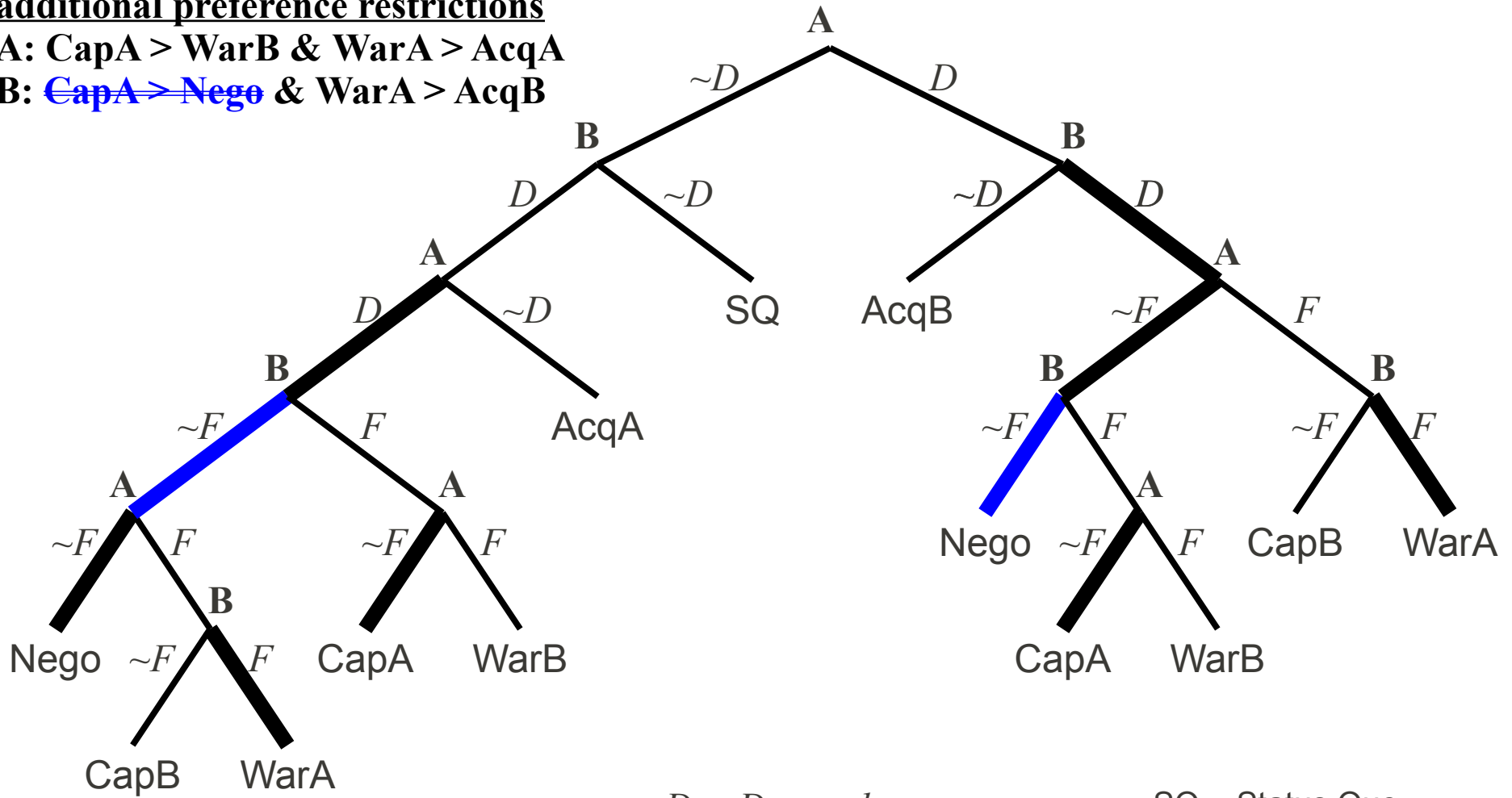
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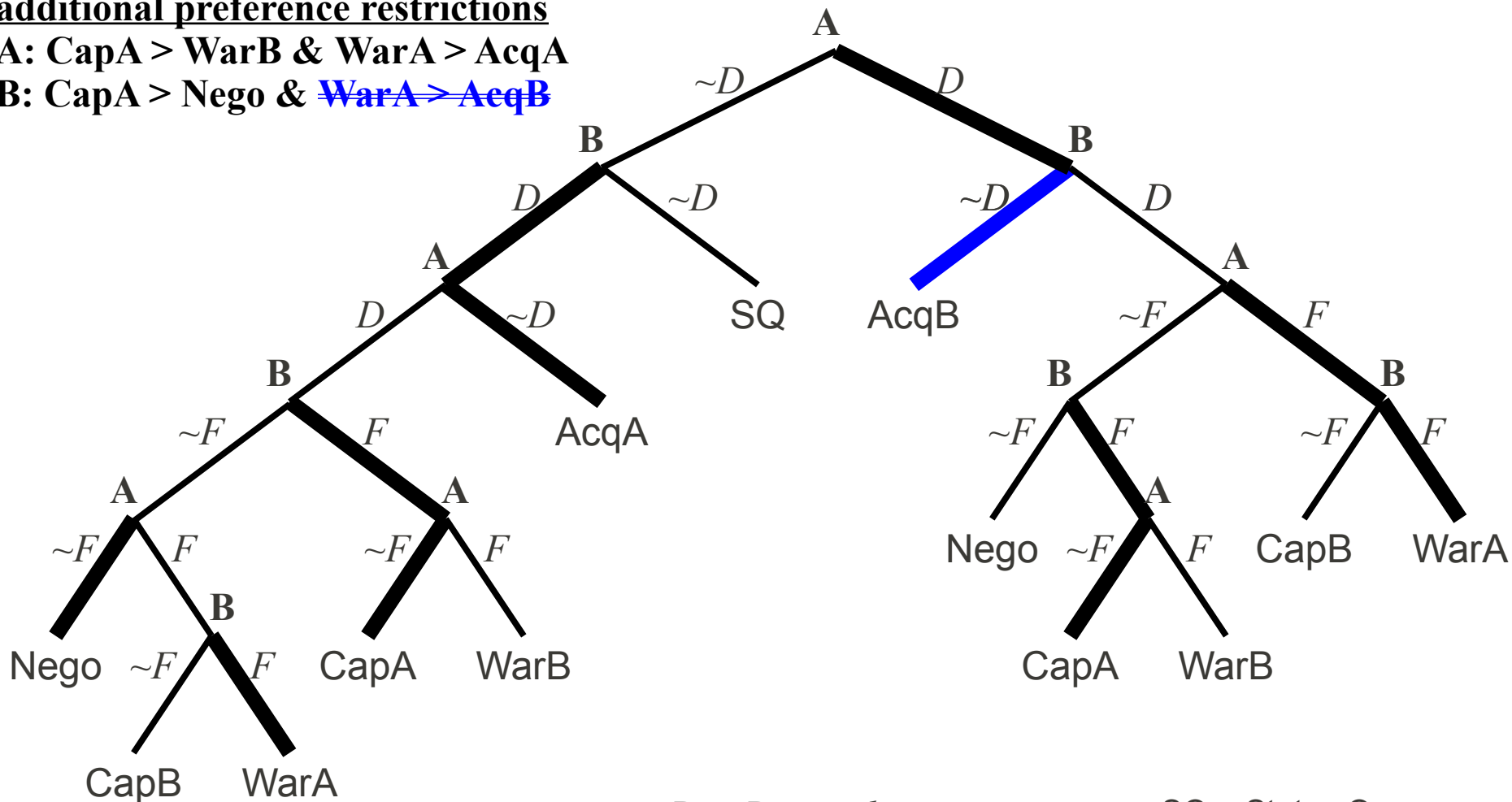
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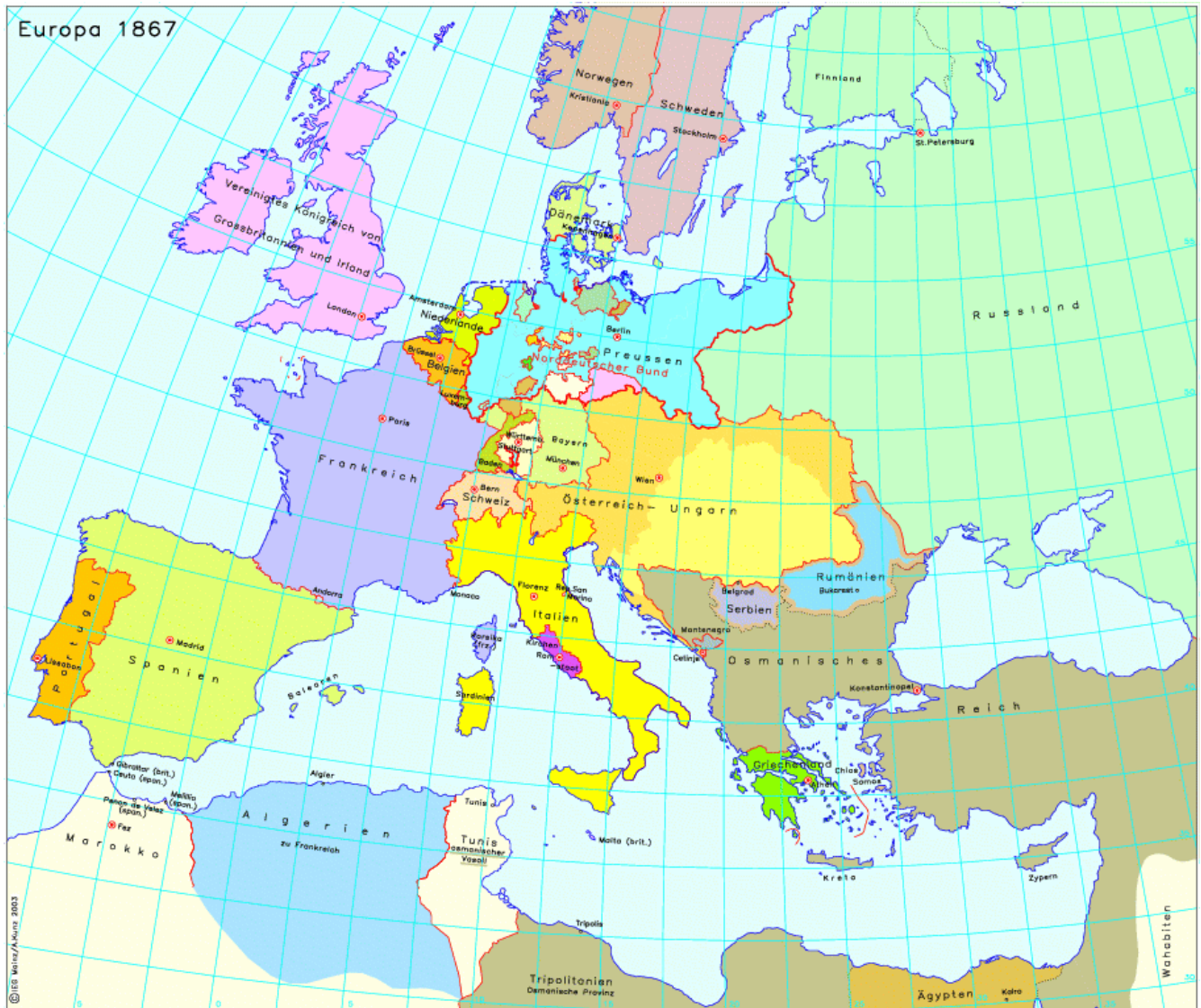
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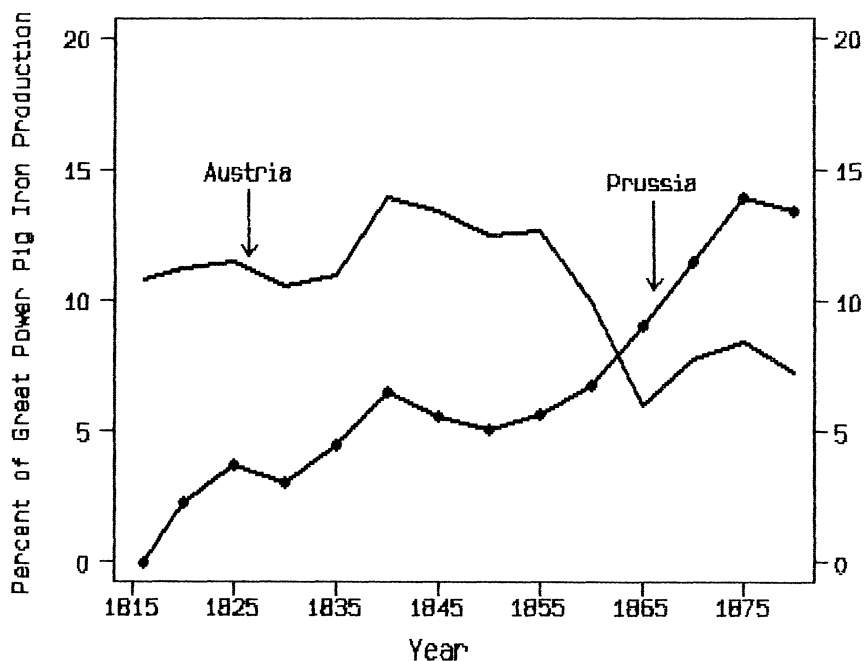


FIGURE 2a  
THE AUSTRO-PRUSSIAN ECONOMIC TRANSITION<sup>a</sup>

<sup>a</sup> The data on pig iron were provided by the Correlates of War Project at the University of Michigan.

mid-1850s on, Austria began a precipitous decline in its military capabilities while Bismarck launched Prussia on a campaign of military expansion. According to the indicators used here, the power transition literally occurred in 1866.

The evidence thus far suggests that the critical difference in growth rates postulated by power-transition and hegemonic stability theorists was satisfied in 1866, but that the required disagreement over the *international* status quo was not satisfied. It is possible, however, that there was a widespread *perception* of a sharp disagreement over the international status quo even though, by objective criteria, such differences did not exist. We can never know with certainty what others believed at a given time, but it is possible to develop sensitive indicators that should reflect quite precisely the prewar beliefs about the impact of an Austro-Prussian war on the international status quo.

The cost of money—the money market discount rate—in key financial centers reflects people's *expectations* regarding the future value of that

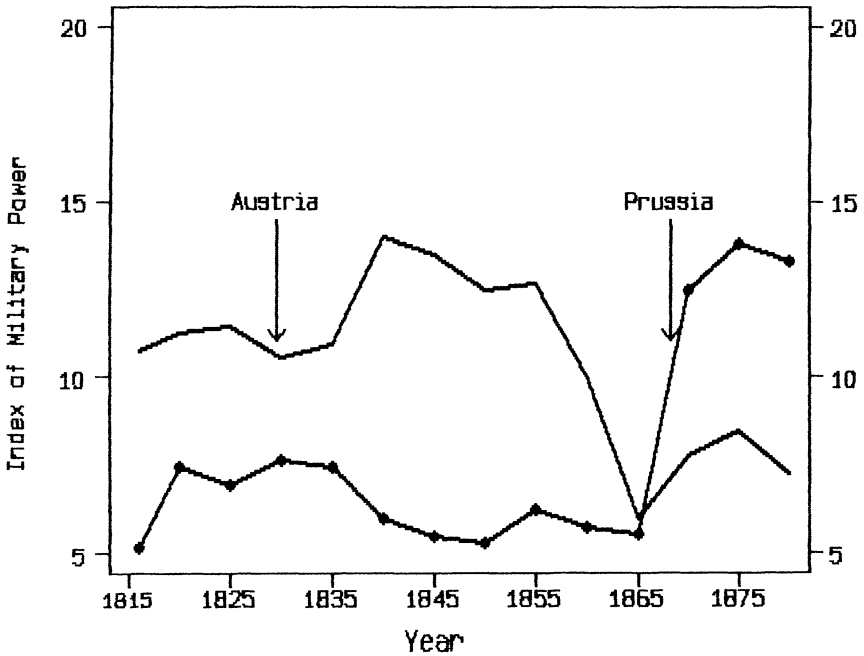


FIGURE 2b  
THE AUSTRO-PRUSSIAN MILITARY TRANSITION<sup>a</sup>

<sup>a</sup> The data on military power were provided by the correlates of War Project at the University of Michigan.

money. When, for instance, a government finds it difficult to borrow money, it is forced to raise the rate it pays for the money—the discount rate—to attract lenders. Thus, a rising discount rate for a nation's money reflects a broad base of declining confidence in that nation.

Just as the rise or decline in discount rates reveals information about *expectations*, so do changes in discount rates across countries. If external conditions are expected to affect everyone more or less equally, the money market discount rates for different currencies fluctuate more or less equally; each will respond equivalently to rising or falling fears and uncertainties. But, *if some countries are expected to be differentially affected by events, their rates will rise or fall (depending upon the content of expectations) more than that of other, less affected, countries.*

Figure 3a depicts biweekly observations of the money market discount rate for Berlin and for a European baseline (defined as the average of the discount rates for London and Amsterdam, two key financial centers in the nineteenth century) between January 1863 and January 1865. The





FIGURE 3a  
THE SECOND SCHLESWIG-HOLSTEIN WAR, 1864

tated during the past week by the prospect of war, and prices have fallen heavily.”<sup>32</sup> Similar reports can be found virtually every week up to the outbreak of hostilities.

Figure 3b demonstrates that, despite the fear of war and its reflection in the rising cost of money, the crisis did not have a substantial differential impact on the expectations concerning Prussia. During the war, however, while the cost of money rose markedly in London, Berlin, and Amsterdam, it rose *more* in Prussia. This reinforces the widely reported observation that Prussia was expected to lose the war.<sup>33</sup> The fact that the price differential between Berlin and the other key financial centers was small supports the belief that the perceived stakes in the war were not very large. It is interesting to note that immediately after the battle of Königgrätz the market responded with a rapid fall in the price of money,

<sup>32</sup> *The Economist*, April 7, 1866, p. 414, and May 5, 1866, p. 535.

<sup>33</sup> Simon echoes the sentiment of many historians when he writes, “it is important to remember that it was by no means a foregone conclusion that Prussia would win; pessimism was widespread in the Prussian camp, and the Austrian government was confident of victory” (fn. 18), 30–31. See also Taylor (fn. 22), 126, regarding expectations from the Austrian perspective, and Showalter (fn. 25), 121, for a general view of Prussian weaknesses.

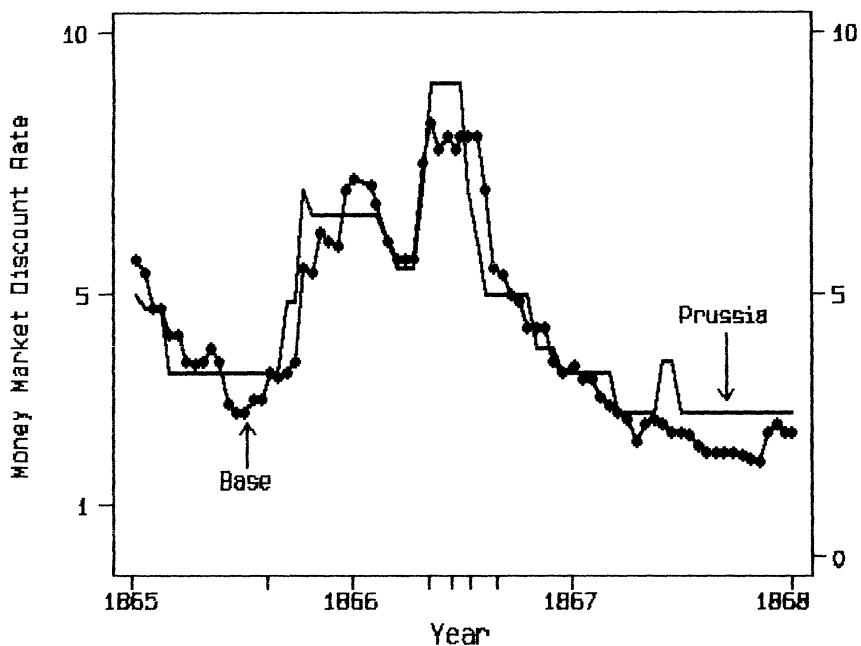


FIGURE 3b  
THE SEVEN WEEKS' WAR, 1866

in which Prussia *led* the baseline of London and Amsterdam. Thus, the expectations in the financial markets were updated to take account of the new information revealed on the battlefield—that the market had underestimated Prussia's chance of victory. The prewar fears of postwar inflation or of defaults on money instruments by a defeated Prussia were allayed by Prussia's decisive victory.

Prussia's place in the European international system was not expected, *ex ante*, to be fundamentally changed by the Seven Weeks' War; this can be seen from a statistical assessment of the difference in the price of money for a significant period prior to the war compared to the period surrounding the war. If the period surrounding the war's crucial events—from the announcement of the Italo-Prussian alliance on April 8 to the end of the war on July 28—had reflected expectations of a fundamental change from the status quo ante for Prussia, the mean *difference* between the Prussian and base discount rate for that period would have been significantly different from the mean difference for the prewar period. If the *international* status quo had not been perceived to be at risk, then there would not have been a significant difference.