Appendix A

DECISION RULES

Proto-Peer and Hegemon Strategy Matrix

<table>
<thead>
<tr>
<th>Hegemon Strategy</th>
<th>Proto-Peer Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONQUEST (4)</td>
<td>Unstable</td>
</tr>
<tr>
<td>ALLIANCE (3)</td>
<td>Unstable</td>
</tr>
<tr>
<td>REVOLUTION (2)</td>
<td>Uncertain</td>
</tr>
<tr>
<td>REFORM (1)</td>
<td>Quasi-Equilibrium</td>
</tr>
<tr>
<td>CONCILIATE (1)</td>
<td>Co-opt (2)</td>
</tr>
<tr>
<td>CO-OPT (2)</td>
<td>Constrain (3)</td>
</tr>
<tr>
<td>COMPETE (4)</td>
<td></td>
</tr>
</tbody>
</table>

Notation system: number designating hegemon’s strategy, number designating proto-peer’s strategy. Thus, Co-opt and Reform are (2,1).

GAME STARTING FROM (1,1), ALL POSSIBLE PATHWAYS

Sequential game, hegemon (H or Heg) moves first, based on an evaluation of the proto-peer (P or P-p).

See Figure A.1 for a graphic presentation of the decision tree.

**************

H: NO

Heg: vulnerable?

NO

Decision tree stops. Game remains at 1,1 (no need to go to proto-peer response because no change in strategy by hegemon)

RESULT: 1,1

**************
Figure A.1—Decision Rules for First Turn of (x,1) Game
H: YES, NO

Heg: vulnerable?

YES

Decision tree goes on to a second set of questions:

Heg: are aims of proto-peer revisionist?

NO

Decision tree stops. Game remains at 1,1 (no need to go to proto-peer response because no change in strategy by hegemon)

RESULT: 1,1

**************

H: YES, YES, LONG; P: NO

Heg: vulnerable?

YES

Decision tree goes on to a second set of questions:

Heg: are aims of proto-peer revisionist?

YES

Decision tree goes on to a third set of questions:

Heg: what is the time horizon for a challenge to appear?

LONG

Hegemon changes strategy toward proto-peer to 2 (co-opt), leading to a current interaction of strategies: 2,1. The game now goes on to the proto-peer, to evaluate whether the proto-peer will change its own strategy as a result of a new strategy by the hegemon.

P-p: Has the change in the hegemon’s strategy placed high constraints on the proto-peer?

NO
Decision tree stops. Game remains at 2,1 (no need to go to hegemon response because no change in strategy by proto-peer)

RESULT: 2,1

**************

**H: YES, YES, LONG; P: YES, NO**

Heg: vulnerable?

YES

Decision tree goes on to a second set of questions:

Heg: are aims of proto-peer revisionist?

YES

Decision tree goes on to a third set of questions:

Heg: what is the time horizon for a challenge to appear?

LONG

Hegemon changes strategy toward proto-peer to 2 (co-opt), leading to a current interaction of strategies: 2,1. The game now goes on to the proto-peer, to evaluate whether the proto-peer will change its own strategy as a result of a new strategy by the hegemon.

P-p: Has the change in the hegemon’s strategy placed high constraints on the proto-peer?

YES

Decision tree goes on to a second set of proto-peer’s questions:

P-p: Is the proto-peer highly dissatisfied?

NO

Decision tree stops. Game remains at 2,1 (no need to go to hegemon response because no change in strategy by proto-peer)

RESULT: 2,1

**************
H: YES, YES, LONG; P: YES, YES, NO; (H: cont)

Heg: vulnerable?

YES

Decision tree goes on to a second set of questions:

Heg: are aims of proto-peer revisionist?

YES

Decision tree goes on to a third set of questions:

Heg: what is the time horizon for a challenge to appear?

LONG

Hegemon changes strategy toward proto-peer to 2 (co-opt), leading to a current interaction of strategies: 2,1. The game now goes on to the proto-peer, to evaluate whether the proto-peer will change its own strategy as a result of a new strategy by the hegemon.

P-p: Has the change in the hegemon’s strategy placed high constraints on the proto-peer?

YES

Decision tree goes on to a second set of proto-peer’s questions:

P-p: Is the proto-peer highly dissatisfied?

YES

Decision tree goes on to a third set of proto-peer’s questions:

P-p: Is the proto-peer risk prone?

NO

Proto-peer changes strategy toward hegemon to 2 (revolution), leading to a current interaction of strategies: 2,2. The game now goes back to the hegemon, to evaluate whether the hegemon will change its own strategy as a result of a new strategy by the proto-peer. Hegemon goes back to the same decision tree choices but
now fed with different information and with different assessments.

Heg: . . . [RESULT: continue playing as if starting point is 2,2]

**************

**H: YES, YES, LONG; P: YES, YES, YES, YES; (H: cont)**

Heg: vulnerable?

YES

Decision tree goes on to a second set of questions:

Heg: are aims of proto-peer revisionist?

YES

Decision tree goes on to a third set of questions:

Heg: what is the time horizon for a challenge to appear?

LONG

Hegemon changes strategy toward proto-peer to 2 (co-opt), leading to a current interaction of strategies: 2,1. The game now goes on to the proto-peer, to evaluate whether the proto-peer will change its own strategy as a result of a new strategy by the hegemon.

P-p: Has the change in the hegemon’s strategy placed high constraints on the proto-peer?

YES

Decision tree goes on to a second set of proto-peer’s questions:

P-p: Is the proto-peer highly dissatisfied?

YES

Decision tree goes on to a third set of proto-peer’s questions:

P-p: Is the proto-peer risk prone?

YES
Decision tree goes on to a fourth set of proto-peer’s questions:

P-p: Is there a high capability differential between the hegemon and the proto-peer?

YES

Proto-peer changes strategy toward hegemon to 3 (alliance), leading to a current interaction of strategies: 2,3. The game now goes back to the hegemon, to evaluate whether the hegemon will change its own strategy as a result of a new strategy by the proto-peer. Hegemon goes back to the same decision tree choices but now fed with different information and with different assessments.

Heg: . . . [RESULT: continue playing as if starting point is 2,3]

**************

H: YES, YES, LONG; P: YES, YES, YES, NO; (H: cont)

Heg: vulnerable?

YES

Decision tree goes on to a second set of questions:

Heg: are aims of proto-peer revisionist?

YES

Decision tree goes on to a third set of questions:

Heg: what is the time horizon for a challenge to appear?

LONG

Hegemon changes strategy toward proto-peer to 2 (co-opt), leading to a current interaction of strategies: 2,1. The game now goes on to the proto-peer, to evaluate whether the proto-peer will change its own strategy as a result of a new strategy by the hegemon.

P-p: Has the change in the hegemon’s strategy placed high constraints on the proto-peer?
YES

Decision tree goes on to a second set of proto-peer’s questions:

P-p: Is the proto-peer highly dissatisfied?

YES

Decision tree goes on to a third set of proto-peer’s questions:

P-p: Is the proto-peer risk prone?

YES

Decision tree goes on to a fourth set of proto-peer’s questions:

P-p: Is there a high capability differential between the hegemon and the proto-peer?

NO

Proto-peer changes strategy toward hegemon to 4 (conquest), leading to a current interaction of strategies: 2,4. The game now goes back to the hegemon, to evaluate whether the hegemon will change its own strategy as a result of a new strategy by the proto-peer. Hegemon goes back to the same decision tree choices but now fed with different information and with different assessments.

Heg: . . . [RESULT: continue playing as if starting point is 2,4]

**************

H: YES, YES, SHORT, NO; P: NO

Heg: vulnerable?

YES

Decision tree goes on to a second set of questions:

Heg: are aims of proto-peer revisionist?

YES

Decision tree goes on to a third set of questions:
Heg: what is the time horizon for a challenge to appear?

SHORT

Decision tree goes on to a fourth set of questions:

Heg: is the threat severe?

NO

Hegemon changes strategy toward proto-peer to 3 (constrain), leading to a current interaction of strategies: 3,1. The game now goes on to the proto-peer, to evaluate whether the proto-peer will change its own strategy as a result of a new strategy by the hegemon.

P-p: Has the change in the hegemon’s strategy placed high constraints on the proto-peer?

NO

Decision tree stops. Game remains at 3,1 (no need to go to hegemon response because no change in strategy by proto-peer)

RESULT: 3,1 (unstable)

<Comment: this result seems unstable in the long run, as it posits a hostile strategy by the hegemon but a nonthreatening strategy by the proto-peer; eventually, either the proto-peer will change strategies—escalate—or the hegemon will de-escalate. As hegemon and proto-peer re-evaluate, at least one is bound to make a change in strategies.}

**************

H: YES, YES, SHORT, NO; P: YES, NO

Heg: vulnerable?

YES

Decision tree goes on to a second set of questions:

Heg: are aims of proto-peer revisionist?
YES

Decision tree goes on to a third set of questions:

Heg: what is the time horizon for a challenge to appear?

SHORT

Decision tree goes on to a fourth set of questions:

Heg: is the threat severe?

NO

Hegemon changes strategy toward proto-peer to 3 (constrain), leading to a current interaction of strategies: 3,1. The game now goes on to the proto-peer, to evaluate whether the proto-peer will change its own strategy as a result of a new strategy by the hegemon.

P-p: Has the change in the hegemon’s strategy placed high constraints on the proto-peer?

YES

Decision tree goes on to a second set of questions:

P-p: Is the proto-peer highly dissatisfied?

NO

Decision tree stops. Game remains at 3,1 (no need to go to hegemon response because no change in strategy by proto-peer)

RESULT: 3,1 (unstable)

{Comment: this result seems unstable in the long run, as it posits a hostile strategy by the hegemon but a nonthreatening strategy by the proto-peer; eventually, either the proto-peer will change strategies—escalate—or the hegemon will de-escalate. As hegemon and proto-peer re-evaluate, at least one is bound to make a change in strategies.}

*************
H: YES, YES, SHORT, NO; P: YES, YES, NO; (H: cont)

Heg: vulnerable?

YES

Decision tree goes on to a second set of questions:

Heg: are aims of proto-peer revisionist?

YES

Decision tree goes on to a third set of questions:

Heg: what is the time horizon for a challenge to appear?

SHORT

Decision tree goes on to a fourth set of questions:

Heg: is the threat severe?

NO

Hegemon changes strategy toward proto-peer to 3 (constrain), leading to a current interaction of strategies: 3,1. The game now goes on to the proto-peer, to evaluate whether the proto-peer will change its own strategy as a result of a new strategy by the hegemon.

P-p: Has the change in the hegemon’s strategy placed high constraints on the proto-peer?

YES

Decision tree goes on to a second set of questions:

P-p: Is the proto-peer highly dissatisfied?

YES

Decision tree goes on to a third set of questions:

P-p: Is the proto-peer risk prone?

NO
Proto-peer changes strategy toward hegemon to 2 (revolution), leading to a current interaction of strategies: 3,2. The game now goes back to the hegemon, to evaluate whether the hegemon will change its own strategy as a result of a new strategy by the proto-peer. Hegemon goes back to the same decision tree choices but now fed with different information and with different assessments.

Heg: . . . [RESULT: continue playing as if starting point is 3,2]

**************

**H: YES, YES, SHORT, NO; P: YES, YES, YES, YES; (H: cont)**

Heg: vulnerable?

YES

Decision tree goes on to a second set of questions:

Heg: are aims of proto-peer revisionist?

YES

Decision tree goes on to a third set of questions:

Heg: what is the time horizon for a challenge to appear?

SHORT

Decision tree goes on to a fourth set of questions:

Heg: is the threat severe?

NO

Hegemon changes strategy toward proto-peer to 3 (constrain), leading to a current interaction of strategies: 3,1. The game now goes on to the proto-peer, to evaluate whether the proto-peer will change its own strategy as a result of a new strategy by the hegemon.

P-p: Has the change in the hegemon’s strategy placed high constraints on the proto-peer?

YES
Decision tree goes on to a second set of questions:

P-p: Is the proto-peer highly dissatisfied?

YES

Decision tree goes on to a third set of questions:

P-p: Is the proto-peer risk prone?

YES

Decision tree goes on to a fourth set of questions:

P-p: Is there a high capability differential between the hegemon and the proto-peer?

YES

Proto-peer changes strategy toward hegemon to 3 (alliance), leading to a current interaction of strategies: 3,3. The game now goes back to the hegemon, to evaluate whether the hegemon will change its own strategy as a result of a new strategy by the proto-peer. Hegemon goes back to the same decision tree choices but now fed with different information and with different assessments.

Heg: . . . [RESULT: continue playing as if starting point is 3,3]

***************

H: YES, YES, SHORT, NO; P: YES, YES, YES, NO; (H: cont)

Heg: vulnerable?

YES

Decision tree goes on to a second set of questions:

Heg: are aims of proto-peer revisionist?

YES

Decision tree goes on to a third set of questions:

Heg: what is the time horizon for a challenge to appear?
SHORT

Decision tree goes on to a fourth set of questions:

Heg: is the threat severe?

NO

Hegemon changes strategy toward proto-peer to 3 (constrain), leading to a current interaction of strategies: 3,1. The game now goes on to the proto-peer, to evaluate whether the proto-peer will change its own strategy as a result of a new strategy by the hegemon.

P-p: Has the change in the hegemon’s strategy placed high constraints on the proto-peer?

YES

Decision tree goes on to a second set of questions:

P-p: Is the proto-peer highly dissatisfied?

YES

Decision tree goes on to a third set of questions:

P-p: Is the proto-peer risk prone?

YES

Decision tree goes on to a fourth set of questions:

P-p: Is there a high capability differential between the hegemon and the proto-peer?

NO

Proto-peer changes strategy toward hegemon to 4 (conquest), leading to a current interaction of strategies: 3,4. The game now goes back to the hegemon, to evaluate whether the hegemon will change its own strategy as a result of a new strategy by the proto-peer. Hegemon goes back to the same decision tree choices but now fed with different information and with different assessments.
Heg: . . . [RESULT: continue playing as if starting point is 3,4]

**************

**H: YES, YES, SHORT, YES; P: NO**

Heg: vulnerable?

YES

Decision tree goes on to a second set of questions:

Heg: are aims of proto-peer revisionist?

YES

Decision tree goes on to a third set of questions:

Heg: what is the time horizon for a challenge to appear?

SHORT

Decision tree goes on to a fourth set of questions:

Heg: is the threat severe?

YES

Hegemon changes strategy toward proto-peer to 4 (compete), leading to a current interaction of strategies: 4,1. The game now goes on to the proto-peer, to evaluate whether the proto-peer will change its own strategy as a result of a new strategy by the hegemon.

P-p: Has the change in the hegemon’s strategy placed high constraints on the proto-peer?

NO

Decision tree stops. Game remains at 4,1 (no need to go to hegemon response because no change in strategy by proto-peer)

RESULT: 4,1 (unstable)

*Comment:* this result seems unstable in the long run, as it posits a hostile strategy by the hegemon but a nonthreatening strategy by the
proto-peer; eventually, either the proto-peer will change strategies—
el escalate—or the hegemon will de-escalate. As hegemon and proto-
peer re-evaluate, at least one is bound to make a change in strate-
gies.]

**************

**H: YES, YES, SHORT, YES; P: YES, NO**

Heg: vulnerable?

YES

Decision tree goes on to a second set of questions:

Heg: are aims of proto-peer revisionist?

YES

Decision tree goes on to a third set of questions:

Heg: what is the time horizon for a challenge to appear?

SHORT

Decision tree goes on to a fourth set of questions:

Heg: is the threat severe?

YES

Hegemon changes strategy toward proto-peer to 4 (compete),
leading to a current interaction of strategies: 4,1. The game now
goes on to the proto-peer, to evaluate whether the proto-peer will
change its own strategy as a result of a new strategy by the hege-
mon.

P-p: Has the change in the hegemon’s strategy placed high con-
straints on the proto-peer?

YES

Decision tree goes on to a second set of questions:

P-p: Is the proto-peer highly dissatisfied?
NO

Decision tree stops. Game remains at 4,1 (no need to go to hegemon response because no change in strategy by proto-peer)

RESULT: 4,1 (unstable)

<Comment: this result seems unstable in the long run, as it posits a hostile strategy by the hegemon but a nonthreatening strategy by the proto-peer; eventually, either the proto-peer will change strategies—escalate—or the hegemon will de-escalate. As hegemon and proto-peer re-evaluate, at least one is bound to make a change in strategies.}

**************

H: YES, YES, SHORT, YES; P: YES, YES, NO; (H: cont)

Heg: vulnerable?

YES

Decision tree goes on to a second set of questions:

Heg: are aims of proto-peer revisionist?

YES

Decision tree goes on to a third set of questions:

Heg: what is the time horizon for a challenge to appear?

SHORT

Decision tree goes on to a fourth set of questions:

Heg: is the threat severe?

YES

Hegemon changes strategy toward proto-peer to 4 (compete), leading to a current interaction of strategies: 4,1. The game now goes on to the proto-peer, to evaluate whether the proto-peer will change its own strategy as a result of a new strategy by the hegemon.
P-p: Has the change in the hegemon’s strategy placed high constraints on the proto-peer?

YES

Decision tree goes on to a second set of questions:

P-p: Is the proto-peer highly dissatisfied?

YES

Decision tree goes on to a third set of questions:

P-p: Is the proto-peer risk prone?

NO

Proto-peer changes strategy toward hegemon to 2 (revolution), leading to a current interaction of strategies: 4,2. The game now goes back to the hegemon, to evaluate whether the hegemon will change its own strategy as a result of a new strategy by the proto-peer. Hegemon goes back to the same decision tree choices but now fed with different information and with different assessments.

Heg: . . . [RESULT: continue playing as if starting point is 4,2]

**************

H: YES, YES, SHORT, YES; P: YES, YES, YES, YES; (H: cont)

Heg: vulnerable?

YES

Decision tree goes on to a second set of questions:

Heg: are aims of proto-peer revisionist?

YES

Decision tree goes on to a third set of questions:

Heg: what is the time horizon for a challenge to appear?

SHORT
Decision tree goes on to a fourth set of questions:

Heg: is the threat severe?

YES

Hegemon changes strategy toward proto-peer to 4 (compete), leading to a current interaction of strategies: 4,1. The game now goes on to the proto-peer, to evaluate whether the proto-peer will change its own strategy as a result of a new strategy by the hegemon.

P-p: Has the change in the hegemon’s strategy placed high constraints on the proto-peer?

YES

Decision tree goes on to a second set of questions:

P-p: Is the proto-peer highly dissatisfied?

YES

Decision tree goes on to a third set of questions:

P-p: Is the proto-peer risk prone?

YES

Decision tree goes on to a fourth set of questions:

P-p: Is there a high capability differential between the hegemon and the proto-peer?

YES

Proto-peer changes strategy toward hegemon to 3 (alliance), leading to a current interaction of strategies: 4,3. The game now goes back to the hegemon, to evaluate whether the hegemon will change its own strategy as a result of a new strategy by the proto-peer. Hegemon goes back to the same decision tree choices but now fed with different information and with different assessments.

Heg: . . . [RESULT: continue playing as if starting point is 4,3]
H: YES, YES, SHORT, YES; P: YES, YES, YES, NO; (H: cont)

Heg: vulnerable?
YES

Decision tree goes on to a second set of questions:

Heg: are aims of proto-peer revisionist?
YES

Decision tree goes on to a third set of questions:

Heg: what is the time horizon for a challenge to appear?
SHORT

Decision tree goes on to a fourth set of questions:

Heg: is the threat severe?
YES

Hegemon changes strategy toward proto-peer to 4 (compete), leading to a current interaction of strategies: 4,1. The game now goes on to the proto-peer, to evaluate whether the proto-peer will change its own strategy as a result of a new strategy by the hegemon.

P-p: Has the change in the hegemon’s strategy placed high constraints on the proto-peer?
YES

Decision tree goes on to a second set of questions:

P-p: Is the proto-peer highly dissatisfied?
YES

Decision tree goes on to a third set of questions:

P-p: Is the proto-peer risk prone?
YES

Decision tree goes on to a fourth set of questions:

P-p: Is there a high capability differential between the hegemon and the proto-peer?

NO

Proto-peer changes strategy toward hegemon to 4 (conquest), leading to a current interaction of strategies: 4,4. The game now goes back to the hegemon, to evaluate whether the hegemon will change its own strategy as a result of a new strategy by the proto-peer. Hegemon goes back to the same decision tree choices but now fed with different information and with different assessments.

Heg: . . . [RESULT: continue playing as if starting point is 4,4]