第１回：イントロダクション、国際関係のパラダイム（テキスト第1章）
授業の目的と構成、「国際関係論とは何か」、隣接分野との関係等について説明する。
第２回：国際関係をとらえる多様なレンズ（テキスト第2章）
国際関係論・国際政治学の諸理論の概要と基本概念について講義する。
第３回：戦略的相互作用としての国際関係
授業で用いられるゲーム理論のモデルについて基礎的な概念を講義する。
資料：鈴木・岡田『国際紛争と協調のゲーム』有斐閣、第1章
第４回：国際関係史（1）ウェストファリアから第一次世界大戦（テキスト第3章）
近代国際関係の成り立ちと第一次世界大戦までの国際関係について講義する。
第５回：国際関係史（2）集団安全保障の挫折と第二次世界大戦（テキスト第4章）
集団安全保障体制や第二次世界大戦までの国際関係について講義する。
第６回：国際関係史（3）冷戦（テキスト第5章）
米ソ冷戦が国際関係に与えた様々な影響について講義する。

戦略的相互作用としての国際関係

IR＝国家と国家の関係

- 戦略的な行為者
- その相互作用

相手は「消せない」のが国際関係

- そして、相手を完全には制御できない

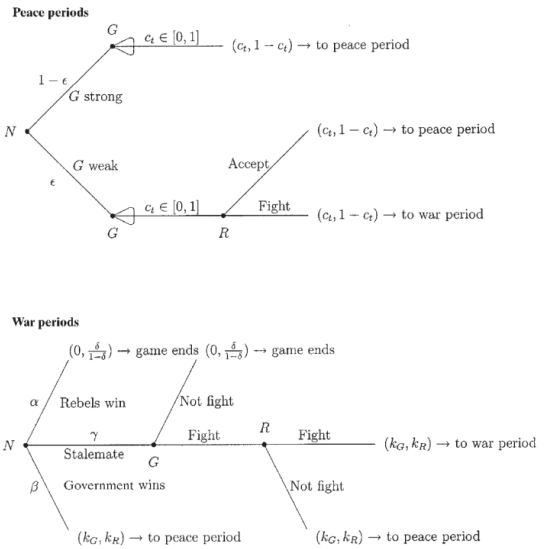
  相手に何かさせること、は難しい

  相手に自分のことを正しく理解させることも

  実は難しい

journal of PEACE RESEARCH volume 41 / number 3 / may 2004

Figure 3. Rebellion or Peace in a Center-Region Bargaining Game



Why Do Some Civil Wars Last So Much Longer than Others?
James D. Fearon
Journal of Peace Research 2004 41: 275
DOI: 10.1177/0022343304043770

Proposition 1: When conditions (1) and (2) below hold, the following strategies – call these the *Fight Equilibrium* – form a subgame perfect equilibrium in the game: In all peace periods, the government does not share any power in the region (i.e. chooses $c_t = 1$), and the rebels always choose to fight if the government is weak. In all war periods, both government and rebels always choose to keep fighting.

The conditions are:

$$k_G \geq -\beta\delta/(1-(1-\epsilon)\delta) \quad (1)$$

$$k_R \geq -\alpha\delta/(1-\delta) \quad (2)$$

Proposition 3: Suppose that conditions (1) and (2) above hold. Let V_G^P be the government's value for the Fight Equilibrium starting from a period in which it is strong, and V_R^W be the rebels' value for the Fight Equilibrium starting from a period in which the government is weak. Then when $\delta V_G^P + V_R^W > 1/(1-\delta)$, there does not exist a subgame perfect equilibrium in which peace prevails on the equilibrium path. When this inequality does not hold, there exist subgame perfect equilibria in which government and region share power in the region and do not fight on the equilibrium path.

- 例、「囚人のジレンマゲーム」

図1

		B国			
		軍縮		軍拡	
A国	軍縮	2	2	0	3
	軍拡	3	0	1	1

AとBは国家で、軍縮と軍拡が政策選択肢だとしよう
望ましさがAとBにとって3＞2＞1＞0の順とする

このとき、合理的（＝自己利益最大化をする）
AとBは、軍縮ないし軍拡のどちらの選択をするだろう？

軍縮のとりあいが社会にとってより望ましい（計４点）

相手と協調する軍縮と軍縮ではなく、相手が軍縮をとるならば、自分だけ軍拡をとりたいと考え、「同時手番の1回きりゲーム」では、軍拡と軍拡で安定する
⇒これを「ナッシュ均衡解」といいます

同時手番の無限繰り返しゲームでは軍縮と軍縮で安定

ナッシュ均衡

相手の手に対する最適対応の組み合わせ

→社会として安定してしまう

なぜ核軍縮が進まないのだろう？

なぜ軍縮できる場合もあるのだろう？

同時手番の無限繰り返しゲームでのナッシュ均衡（軍縮と軍縮で安定する場合）

1）割引因子（β）を考えます
2）ゲームの終わりがわからないとします（わかるならば最後の最後、裏切り＝軍拡）
3）期待利得を考えましょう。

毎期、軍縮しあって協力すると、2が得られ、期待利得は、

$E(\text{軍縮・軍縮}) = 2 + 2\beta + 2\beta^2 + 2\beta^3 + 2\beta^4 + 2\beta^5 + 2\beta^6 + 2\beta^7 + \cdots$ ①

この時、$E(\text{軍縮・軍縮})$にβを掛けてみて、①から引き算すると、

$E(\text{軍縮・軍縮}) - \beta \cdot E(\text{軍縮・軍縮}) = 2$

よって、 $E(\text{軍縮・軍縮}) = 2 / (1-\beta)$

4）いくつかの戦略があるのですが、トリガー戦略というものを考えましょう（ほかの戦略には、TFTなど）
トリガー戦略：相手が協力を選択している限り自分も協力を選択する。相手が協力しないを選択したら自分も協力しないを選択し、以後、協力しないという選択を継続する

同時手番の無限繰り返しゲームでのナッシュ均衡（軍縮と軍縮で安定する場合）

5）トリガー戦略の時の、裏切ってから以降の期待利得を計算してみましょう。

軍縮しあって協力していた時は2が得られたものの、一度裏切ってしまった場合の期待利得は、
E(裏切り・軍縮：トリガー戦略)＝$3+\beta+\beta^2+\beta^3+\beta^4+\beta^5+\beta^6+\beta^7+\cdots\cdots$　②
②は、$3+\beta/(1-\beta)$

この時、①と②を比べれば、どういう条件において裏切りよりも協力の継続がいいのかがわかる。
①＞②だとずっと協力がいい。

$2/(1-\beta) > 3+\beta/(1-\beta)$ なので、 $\beta \geq 1/2$

割引因子が1／2より大きければ協力し合う、軍縮・軍縮がナッシュ均衡になる

他にも、いろいろなゲームがあり得ます

A1 \ A2	C	D
C	Both drivers swerve; neither is humiliated or harmed.	A1 is "chicken"; A2 "wins."
D	A1 "wins"; A2 is "chicken."	Both drivers are killed in a serious wreck.

A1 \ A2	C	D
C	3, 3	2, 4*
D	4, 2*	1, 1

A1 \ A2	C	D
C	Both hunters split the stag.	A1 goes hungry; A2 eats the rabbit.
D	A1 eats the rabbit; A2 goes hungry.	Both hunters split the rabbit.

A1 \ A2	C	D
C	4, 4*	1, 3
D	3, 1	2, 2*

もっと大事なゲームは、ラグビーでしょうか？

小話：スポーツと愛国心、戦争

Bertoli, Andrew (2017) “Nationalism and Conflict: Lessons from International Sports” *International Studies Quarterly* 61(4), 835-849.

Table 1. Notable Cases Where Scholars Have Claimed That Sports Nationalism Led to Interstate Conflict

1. Bodyline (1932)
2. Italian World Cup (1934)
3. Nazi Olympics (1936)
4. Moscow Dynamo Soccer Trip to Britain (1945)
5. Football War (1969)
6. Croatian War of Independence (1991)
7. Egyptian-Algerian World Cup Dispute (2009)
8. Serbian-Albanian Drone Conflict (2014)
9. English-Russian Euro Riots (2016)

Table 2. Example of the Final Standings from a 1994 Qualification Round in Europe

Rank	Country	Score	Qualified
1	Italy	16	Yes
2	Switzerland	15	Yes
3	Portugal	14	No
4	Scotland	11	No
5	Malta	4	No
6	Estonia	1	No

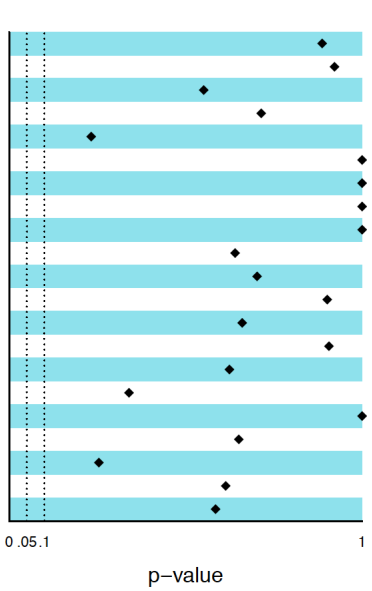
Note: The sample consists of pairs of countries like Switzerland and Portugal that barely made and barely missed qualification.

Table 3. Countries That Barely Made and Barely Missed the World Cup

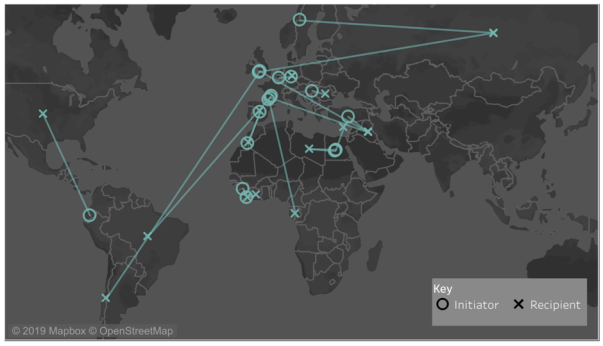
Qualifier	Non-qualifier	Year	Qualifier	Non-qualifier	Year
Yugoslavia	Romania	1958	Tunisia	Egypt	1978
France	Belgium	1958	France	Ireland	1982
Austria	Netherlands	1958	Austria	Bulgaria	1982
Soviet Union	Poland	1958	Britain	Romania	1982
Hungary	Bulgaria	1958	Peru	Uruguay	1982
Britain	Ireland	1958	El Salvador	Mexico	1982
Paraguay	Uruguay	1958	New Zealand	China	1982
Argentina	Bolivia	1958	Portugal	Sweden	1986
Bulgaria	France	1962	Soviet Union	Switzerland	1986
Switzerland	Sweden	1962	Bulgaria	East Germany	1986
Portugal	Czechoslovakia	1966	Romania	Denmark	1990
Bulgaria	Belgium	1966	Austria	Turkey	1990
West Germany	Sweden	1966	Czechoslovakia	Portugal	1990
Chile	Ecuador	1966	United States	Trinidad	1990
Czechoslovakia	Hungary	1970	UAE	Qatar	1990
Romania	Greece	1970	Ireland	Denmark	1994
Bulgaria	Poland	1970	Switzerland	Portugal	1994
Italy	East Germany	1970	Bulgaria	France	1994
Sweden	France	1970	Netherlands	Britain	1994
Belgium	Yugoslavia	1970	Bolivia	Uruguay	1994
Peru	Bolivia	1970	Cameroon	Zimbabwe	1994
Morocco	Nigeria	1970	Nigeria	Ivory Coast	1994
Sweden	Austria	1974	Morocco	Zambia	1994
Netherlands	Belgium	1974	South Korea	Japan	1994
Yugoslavia	Spain	1974	Nigeria	Guinea	1998
East Germany	Romania	1974	Jamaica	Costa Rica	1998
Poland	Britain	1974	Chile	Peru	1998
Uruguay	Colombia	1974	Senegal	Morocco	2002
Argentina	Paraguay	1974	Nigeria	Liberia	2002
Haiti	Trinidad	1974	Ivory Coast	Cameroon	2006
Italy	Britain	1978	Tunisia	Morocco	2006
Austria	East Germany	1978	Togo	Senegal	2006
France	Bulgaria	1978	Angola	Nigeria	2006
Poland	Portugal	1978	Algeria	Egypt	2010
Sweden	Norway	1978	Nigeria	Tunisia	2010
Spain	Romania	1978			

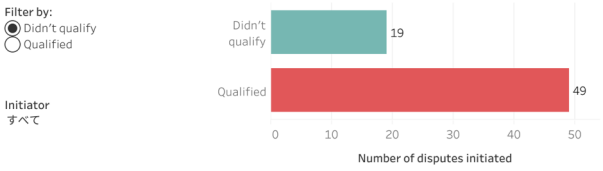
Figure 1. Balance Between the Qualifiers and Non-Qualifiers

Variable Name	Treatment Mean	Control Mean
Total Population	33,438,500	35,742,500
Urban Population	9,189,200	8,879,540
Imports	23,614,700,000	18,628,100,000
Exports	21,695,600,000	18,894,900,000
Material Power Score	0.01	0.009
Great Power Status	0.113	0.113
Level of Democracy	0.465	0.465
Engaged in Civil War	0.01	0.01
Resolved Civil War	0.01	0
Year of State Formation	1881	1877
Birth Rate	23.6	24
Infant Mortality	51.1	50.6
Life Expectancy	65.6	66
Median Age	27.7	27.7
Number of Alliances	15.7	16.5
U.S. Ally	0.4	0.479
Soccer Most Popular Sport	0.93	0.93
Appearance at Previous World Cup	0.352	0.31
MIDs Initiated in the Year Before	0.183	0.113
MIDs Initiated in the 3 Years Before	0.69	0.577
MIDs Initiated in the 5 Years Before	1.07	0.873



Disputes initiated in the two years after qualifying or not qualifying for the FIFA World Cup, 1958 to 2010





Note: some countries initiated disputes against multiple countries at the same time. These are counted as one dispute. Only countries who qualified or didn't qualify by two points or less are included.
Source: Bertoli, A. Nationalism and conflict: lessons from international sport (2017)
Palmer, Glenn, Vito D'Orazio, Michael Kenwick, and Matthew Lane. 2015. "The MID4 Data Set: Procedures, Coding Rules, and Description." Conflict Management and Peace Science. Forthcoming.

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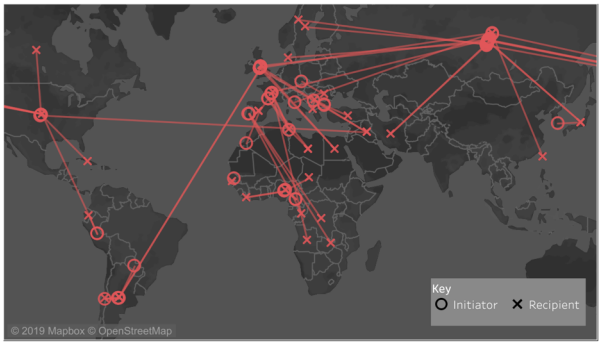

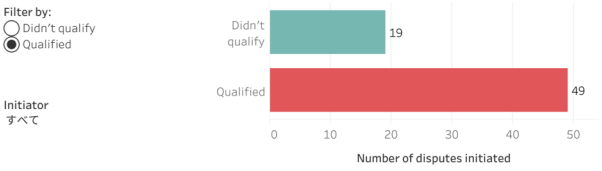

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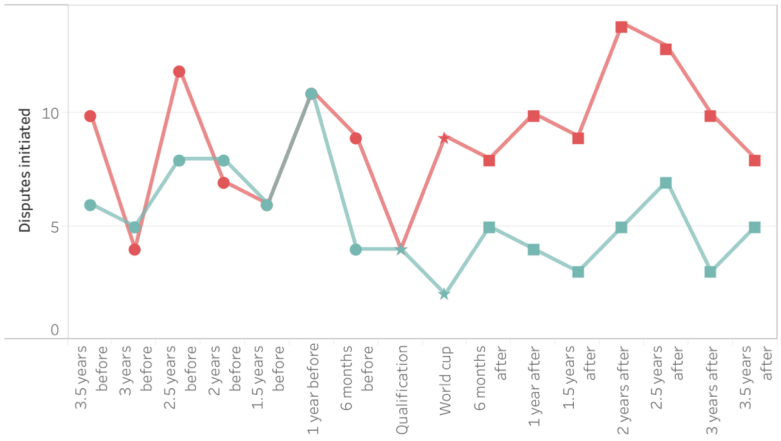
Palmer, Glenn, Vito D'Orazio, Michael Kenwick, and Matthew Lane. 2015. "The MID4 Data Set: Procedures, Coding Rules, and Description." Conflict Management and Peace Science. Forthcoming.

Number of militarised interstate disputes initiated by countries who did and didn't qualify for the World Cup



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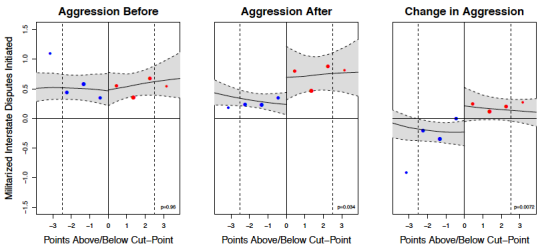
Palmer, Glenn, Vito D'Orazio, Michael Kenwick, and Matthew Lane. 2015. "The MID4 Data Set: Procedures, Coding Rules, and Description." Conflict Management and Peace Science. Forthcoming.

Table 4. Estimating the Effect of the World Cup on State Aggression

	Estimate (SE)	p-value	n
Entire Sample	0.38** (0.14)	0.007	142
Sub-Groups			
Countries Where Soccer Is the Most Popular Sport[4]	0.41* (0.16)	0.011	132
Countries Where Soccer Is Not the Most Popular Sport	0.00 (0.00)	NA	10
Shifting the Regression Discontinuity Window			
Countries That Qualified/Missed by One Point or Less	0.37* (0.17)	0.040	92
Countries That Qualified/Missed by Three Points or Less	0.49** (0.15)	0.001	162
Entire Sample (No Ties)	0.43* (0.17)	0.012	102
Other Statistical Tests			
Linear Regression with All Control Variables	0.40** (0.14)	0.004	142
Difference-in-Differences t-test	0.38** (0.14)	0.006	142
Post-Treatment Outcome Alone (not Dif-in-Dif)	0.44** (0.17)	0.009	142
Tests that are Insensitive to Outliers			
Signed-Rank Test	–	0.009	142
Dummy for Increase in Disputes Initiated	0.15** (0.05)	0.007	142
Removing the U.S. and Soviet Union	0.33* (0.14)	0.021	139
Other Outcomes			
Revisionist Disputes Initiated	0.38** (0.12)	0.001	142
Disputes Initiated That Involved the Use of Force	0.28* (0.13)	0.036	142
Disputes Initiated That Involved a Direct Attack	0.23* (0.10)	0.026	142
Military Participation	0.6%* (0.3%)	0.013	138

Notes: The standard errors and p-values in this table were computed using randomization inference (except for the t-test). All tests are two-sided. Unless otherwise specified, the outcome is the change in aggression between the qualifier and non-qualifier groups (difference-in-differences). I define change in aggression as the difference in the number of Militarized Interstate Disputes initiated between (1) the period ranging from qualification to the second year after the World Cup and (2) the period of the same length prior to qualification. I use these time intervals to account for conflicts that may have been caused by the residual effects of nationalism. Nevertheless, the estimates presented here are similar for other choices of interval length. See the Supporting Information for a full summary of the robustness checks. * p<0.05, ** p<0.01, *** p<0.001

Figure 3. Using Smoothers to Estimate the Treatment Effect



Note: The shaded regions represent the 95% confidence intervals, which were computed using non-parametric bootstrapping.