PEDAGOGY

Playing Games with International Relations

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After reviewing the advantages and disadvantages in using simulations to teach International Relations, this paper develops pedagogy for using simulations to teach International Relations (IR) theory. After discussing methods for integrating simulations into a class on IR theory the paper then goes on to present three simulations and the theories that they can be used to teach. The three simulations are the Classical Realism Game, Prisoner's Dilemma to the *N*th degree, and Diplomacy. Finally, the three simulations are compared.

Keywords: international relations, pedagogy, simulations

Simulations have become popular in the Social Sciences and related fields as pedagogical tools (Wolfe and Crookall, 1998) and there is growing evidence that, if integrated properly, they can be very effective teaching tools. (For example, see Torney-Purta, 1996.) A growing number of economics professors are moving from using simulations in their experimental work to using them as teaching tools (Gremmen and Potters, 1997) and in a recent survey 97.5% of business schools reported using simulations to teach their students (Faria, 1998:295). This same trend exists in the teaching of international relations[1] (IR) motivated by recent findings that, "... students retain 10% of what they read, 20% of what they hear, 30% of what they see, 50% of what they see and hear, 70% of what they say, and 90% of what they do and say together" (Boyer, Caprioli, Denemark, Hanson, and Steven, 2000:4).

While their usage in the teaching of IR is growing, the pedagogical literature that supports this growth is still small. It also suffers from a lack of attention in how to integrate simulations as part of a course. (This is true with the use of simulations for education in general as well. See Wolfe and Crookall, 1998.) This is especially true in the area of teaching IR theory outside the area of negotiations and diplomacy. (For examples, see Starkey, Boyer, and Wilkenfeld, 1999, or Friman, 1991. For an exception to this generalization, see Chapin, 1998 or Sadow, 1991.) This

[1]To see several syllabi that integrate simulations in teaching IR, see http://www.polsci.wvu.edu/PolyCy/psteach.html.

stands in stark contrast to the literature on using case studies, which provides many examples, has an extensive discussion on effectiveness, and general how-to guides for using cases in the classroom. (For examples, see Golich, 2000, or Lantis, 2000.)[2]

The literature on simulations, while providing specific examples of simulations (see Friman, 1991; Flynn, 2000; Zeff, 2003; Switky, 2004) and evidence that simulations are effective teaching tools (see Brown and King, 2000), has a dearth of material addressing the best way to integrate simulations into teaching about IR theory, especially at the university level. Without an accessible and brief pedagogy for use of IR theory simulations, educators may be wary of adopting any of the growing number of simulations and games that are being reported on in the literature. This paper aims to break new ground by addressing this gap in the literature by focusing on a general pedagogy for the use of simulations to teach IR. It also contributes to the literature by outlining three games that can be used to illustrate basic IR theories of particular use in an introductory IR class.

This paper begins by defining simulations and games (for the sake of cutting down on verbiage, the term simulation includes games that simulate theory as well), then discusses some of the various advantages and disadvantages that come with the use of simulations. I then present some general guidelines for integrating simulations as effective teaching tools when applied to the study of IR theories. Three simulations that I have found effective in teaching IR are presented next: The Classical Realism game, Prisoner's Dilemma to the *N*th degree, and Diplomacy. Each simulation is explained and the way to use them to teach specific theories is discussed. In the conclusion, a comparison of the advantages and disadvantages of the various simulations is made.

Definitions and Distinctions

Ellington, Gordon, and Fowlie (1998) have what I believe to be the most useful discussion of simulations and how they relate to case studies and games. While Jones (1998) argues that no definition can be adequate but that a simulation needs to present a "reality of function," Ellington et al. (1998:2) define simulations as "ongoing representations of real situations." Simulations can be quite useful in illustrating how real institutions function and allowing students to see how an institutional structure can affect how decisions are made in the real world. Model United Nations is a good example of a simulation that provides such an insight.[3] Ellington et al. (1998:3) describe games as being made up of "competition and rules," while a case is an "in-depth study carried out to illustrate special characteristics." It is important to point out that these definitions are not mutually exclusive and many of the exercises used in education contain elements of more than one of these types (Ellington et al., 1998). Games with abstract rules can be used to illustrate how theories "work" and how they might apply to the real world.[4] Two of the games discussed later—the Classical Realism game and Prisoner's Dilemma to the *N*th degree—are good examples of games with abstract rules.

Another essential difference between cases, games, and simulations is in how the students experience the exercise. Case-based teaching focuses on discussion (Lantis, Kuzma, and Boehrer, 2000:5) while simulations and games add the element of

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[2]Indeed there has been an intensive effort sponsored by the Pew Charitable Trust to collect and disseminate effective foreign policy cases (Lantis, Kuzma, and Boehrer, 2000:5–6). Unfortunately, no such effort has been made with International Relations simulations. For more information on cases see http://data.georgetown.edu/sfs/ecase/.

[3]For more information on Model United Nations see http://www.nmun.org/ or http://www.amun.org/.

[4]I would like to thank one of the anonymous reviewers for providing clarifying insights on the differences between games and simulations that are incorporated in this paragraph. Further helpful insights about particular disadvantages of simulations, the issue of grading, and other issues pointed out by both anonymous reviewers are included throughout the paper.

active doing. The student becomes the lab rat and then gets to discuss the experiment. As Jones (1998:334) puts it, "basically, a simulation is like a case study—the serious examination of a problem—but with the participants on the inside, not on the outside." In my experience, the most effective use of simulations and games for teaching theory is as case studies in discussions and assignments. Indeed, much of the pedagogy that I recommend for teaching with simulations is borrowed from case-study approaches. (For a further discussion of using simulations as a basis for case-teaching as well as other non-case cases, see Cusimano, 2000.)

While simulations, games, and cases can overlap, it is important to note that simulations themselves can vary and that this variety can have a direct impact on their ability to teach different things and their usefulness in the classroom. The three simulations that I present vary in terms of the cost, the length of time they demand, and the amount of preparatory effort required by both instructor and student. Simulations can also vary in terms of how much emphasis they put on process and content. Content-focused simulations emphasize the amount of information the student needs to absorb about the background scenario or case while process-focused simulations emphasize and require more student effort in the process of interaction. Because my focus in this paper is IR theory, all the games are used in a way that targets process questions.

Advantages and Disadvantages of Using Simulations

While simulations have much to recommend them, it is important to recognize that their use comes with several important costs. Simulations can help make complex theory clearer to the student, yet they take away from frontal lecture time and discussion where the educational flow is more under the control of the professor. Finding the correct balance between the two can be difficult. Not only do simulations take class time, but they also demand time and organizational effort (which becomes more challenging as the size of the class grows) from the professor that could be used for other kinds of preparation (Ellington et al., 1998; Christopher, 1999). The successful use of simulations is contingent on the cooperation of the majority of students and if that is not forthcoming, you will be wasting your class time. Uncooperative students can also lead to serious problems where a minority of students do much of the work. One must always keep in mind that the simulation must fit the educational purpose of the course or it will again be a waste of time (Ellington et al., 1998). In addition, it is important to remember that while most students enjoy and benefit educationally from simulations, this is not true of all students, some of whom prefer traditional teaching methods (Torney-Purta, 1998:95).

Given the disadvantages of using simulations, why do it? One of the primary reasons is that simulations engage the students in ways that lectures often cannot (Ruben, 1999) especially in the area of dry theory (Ip and Linser 2001). "By giving students the opportunity to exercise judgment, simulations can bring material to life—without sacrificing content learning" (Hess, 1999:1). Even when compared to other active learning approaches, simulations can give added motivation (Ellington et al., 1998:7) and urgency because "the competitive nature of many simulations lends an urgency to collaborations that is lacking in more traditional group projects" (Hess, 1999:5).

In addition to bringing a sense of excitement to the classroom, simulations have the added advantage of making theory clear in a way that lectures and discussions do not. In simulations the participants are "... the guinea pigs, subjects for observation and inquiry" (Christopher, 1999:441). This allows the students to "... create their own empirical database ...." (Marks, 1998:2) and "experience some of the building blocks of IR Theory ..." (Duffy, 2000:1). As one student wrote,

> The simulation provided for "three–dimensional learning" and we began to see where and how the theory actually applied. This not only led to a fuller understanding of what we were learning about but also helped to reinforce what was going on in class. (Introduction to International Relations student, University of Maryland, Winter 2000–2001)

This ability to experiment with theory is an especially important pedagogical advantage in a field like IR where there are no explicit rules (Sadow, 1991). "Learning by doing often effectively imparts information that is important to study but difficult to transmit directly" (Sadow, 1991:373). Simulations can also allow students to work in teams constructing knowledge together, providing insight and motivation to each other (Torney-Purta, 1998:207–10; and Ruben, 1999). This can create a useful level of educational cooperation among the students (Zeff, 2003). Empirical studies in general have shown simulations to "be particularly useful in reinforcing the teaching of . . . facts and principles and in teaching analytical skills (Ellington et al., 1998:6–8) as well as developing a more complex view of the world" (Torney-Purta, 1996; 1998).

In addition to their direct educational benefits, simulations have several important side benefits. Simulations can empower students by allowing them to take the initiative (Ellington et al., 1998:7) and creating an environment of peer-based learning (Ruben, 1999). Also, by creating a situation where the students are the center of activity and the prime movers, simulations give the professor the opportunity to observe how the students interact and to identify students who are natural leaders, students with potential that need to be coaxed, and students who are struggling. These things are more readily apparent during a simulation than while the students are "performing" for the professor in a frontal assessment.

Guidelines for Using Simulations to Teach IR Theory

I believe that the best way to get educational mileage out of a simulation is to treat it as an interactive case where learning takes place before, during, and after the simulation. Petranek (1992:174) argues that there are "three levels of learning in simulations: participating, debriefing, and journal writing." I would argue that there are opportunities for teaching at six different stages of simulations: (1) during preparation; (2) while playing the simulation; (3) upon pausing at significant moments during the simulation to reflect; (4) during oral debriefing; (5) at written debriefing; and (6) as cases to be referenced in examinations. Not all these methods need to be used for each simulation but each can be used to further the educational goals that the simulation helps to achieve. In the following paragraphs, I address each of these opportunities in turn.

Preparation

For many simulations, much of the learning takes place while the students are preparing for their roles, especially if they are required to research the positions they have been assigned. As the students prepare policy papers or sort out their interests before playing, they are increasing their knowledge of general world politics and their appreciation of the complexity of the world around them (Starkey, Boyer, and Wilkenfeld, 1999). Torney-Purta (1996:208) refers to these preliminary policy papers as "scaffolding for negotiation," which helps the students organize their thinking and move down the road to appreciate the complexity of the international system. Duffy (2000) recommends reminding the students during their preparation to think about the simulation in the context of IR theory, and, before the simulation starts, giving specific thought-provoking questions the students should have in mind as they play.

Playing the Simulation

At this stage, the students climb into their roles, take action, and try to control the situation as it unfolds. In a frontal lecture, students might be exposed to theory and facts; in a discussion, they may debate points with their fellow students. In simulations, students experience "facts, emotions, relationships, strategies, and feelings . . ." (Petranek, 1992:174) all together. This enables the students to see and experience, which clarifies theories in a way lectures cannot.

> The abstract theory of realism [when playing the simulation] is brought onto an understandable level. By participating in this game, I was able to think like a realist, something I was unable to do before this simulation. Plus I must admit it was fun. (Introduction to International Relations student, University of Maryland, Winter 2000–2001)

The essential educational need here is to ensure that the fun does not run away with the show. First of all, it is important to choose the right simulation that will illustrate the theory being taught. Second, when the costs in terms of time begin to outweigh the benefits in education, the professor needs to be aware enough to bring the simulation to a close. If time is an issue, the simulation need not be played until there is a "winner," rather, only until the educational points are made. It is also important to make very clear how participation will be graded—especially in zero sum simulations where there are clear winners and losers. I recommend tying grading to effort rather than success so as not to create hostility or negative feelings about the exercise among students. In addition, I have found that adding small grade point bonuses to "winning" can create strong incentives but do not create hostility on the part of students who do not receive a bonus.

Pausing at Significant Moments during the Simulation to Reflect

Since the professor is not running an experiment for data, there should be no fear of "contaminating the results." If an opportunity arises to make a powerful point after an action, there is nothing wrong and much right in stopping the action and calling attention to a particular event or process under way. Some of the most productive teaching I have had has been in mini-discussions with students during pauses in the action. One can also make certain points or draw attention to certain behavior of individual students as they interact. This can plant important seeds that can come to full fruition in discussions after the simulation. In keeping with the notion that this is an experiment where contamination is not a concern, do not be afraid to "instigate" or act as *agent provocateur* if it will further your educational goals.

Oral Debriefing

Many in the literature on simulations (for example, see Steinwachs, 1992; Christopher, 1999) stress the importance of oral debriefing for getting students to analyze and learn from what they have just experienced. In my view, debriefing a simulation should serve the same educational purpose as analyzing a case using typical case methodology. Since, in essence, what the students in the simulation have just done is build a case for the debriefing, an effective approach is to treat it as one. Borrowing from the case literature, the facilitator in a debriefing should apply Lamy's DEPPP (Describe, Explain, Predict, Prescribe, and Participate) approach (Cusimano, 2000:80). Students should be encouraged to: (1) describe what just happened; (2) explain it from the actor's perspective (in this case either how they viewed things or how, during play, they viewed the perspectives of their compatriots); (3) predict and prescribe policy options if the simulation was to be played again or continued; and (4) participate.

Using this approach with cases, students participate directly by "... preparing questions and challenges for the other actors" (Cusimano, 2000:80). With simulations, the effect is increased because the students have just played the role and with other students analyzing their perspective, they can act as witnesses either for or against their peers' analysis. To allow for this kind of interaction, the facilitator of the discussion should avoid drawing conclusions until the students have had a chance to process and raise questions and connections themselves (Steinwachs, 1992). Petranek (1992:174) suggests a different debriefing organization of going through "... facts, the emotions, empathy, and explanations." Using either approach, the key is to move the students to the point where they can productively analyze the simulation using the theoretical tools they have learned.

During the entire debriefing after the "case" has been described the focus should be on the connection between the simulation and the theories being applied. Listed below are questions that have served me very well in this regard. This list should not be seen as being only for oral debriefing but can and should serve in both written debriefing and examinations. It is important to remember that both the instructor and the students should see the simulation not only as a means of lending credence to a theory but as a means to discredit it. In addition, in debriefings, time should be spent analyzing the rules of the game and how they reflect or do not reflect reality. For instance, students can learn a lot from the observation that the game Diplomacy is a very close recreation of neorealist theory but is arguably (and I have heard intense arguments on this point) not a very accurate recreation of the real world.

1. What happened?
2. Why do you think Anna did what she did? Was it the right move? Would you have done the same thing?
3. Did the rules force Nick or Kate to make that move? Do the "rules" of the international system force states to behave in certain ways? Does the rule that "forced" Gilad or Barrett to make that move also exist in the real international system?
4. How do the events of the simulation validate or contradict theory?
5. Would other theories do worse or better explaining what happened?
6. Did individual people or groups of people act in the same ways that states do in this simulation?
7. What assumptions drove players that were not dictated by the rules? Can we generalize these assumptions to the international system? Do these assumptions validate theory?
8. How real was the simulation? Did the process of relations in the simulation reflect the process of relations that takes place between states? Are the rules an accurate depiction of reality?
9. How would rules need to be changed for a fair comparison of theories?
10. What does the simulation miss that would either cause problems for the theory or provide more validation?

Written Debriefings

Petranek (2000) argues convincingly that, although rarely discussed in the literature, written debriefing can make important contributions to the students' educational experience, which are worth the extra time the debriefing demands from both professor and students. It gives students time to reflect and gain perspective as well as more carefully organize their ideas and apply theory (Petranek, 1992, 2000). Integrating the simulations into the written assignments of the students makes the students take them more seriously and allows them to apply a more exacting analytical approach to them. It also can wring more mileage out of the simulations by

allowing them to be used as counterfactuals or added cases to be compared with the real-world cases covered in class.

As Cases to be Referenced in Examinations

The same benefits that can be realized from written debriefing of the simulations can be achieved using them as cases in examinations. Testing can push the students to integrate what they have learned by doing with what they have studied using more traditional methods (Sadow, 1991; Jones, 1998). I have often asked students to analyze a simulation on an exam using a different set of theories from the ones we applied in class and have found the results to be impressive. In the following excerpt, a student was asked to apply Bremer's (1996) article, "Dangerous Dyads: Conditions Affecting the Likelihood of War," to the game Diplomacy (which is discussed in further detail below). To put the comments in context, it is worth knowing that Diplomacy is a simulation of Europe on the eve of WWI with rules that come straight from a neorealist conception of the world where there is no hierarchy and might often is right.

> In analyzing interstate war, Stuart Bremmer uses Clausewitz's statement that war is "nothing but a duel on a large scale" to frame his state dyads approach to predicting the causal factors of war ... [In Bremmer's analysis] Geographical proximity (contiguity) had the strongest correlation with war ... "Diplomacy" illustrated the tendency for contiguity to provide a strong opportunity for conflict. States separated by land masses do not usually experience a Security Dilemma with one another. England, for example, did not feel threatened by Italy, Russia, or Turkey because their geographical location did not present an immediate threat (Security Dilemma). On the other hand, the dyads of England/France, Russia/Turkey, and Germany/France suffered from Security Dilemmas due to the proximity of the states to each other.... (Introduction to International Relations student, University of Maryland, Winter 1999–2000)

The following is a shorter response to the same question which also illustrates how another student applied theory to simulation as case.

> In Diplomacy, Hungary and France allied together and were involved in more aggressive acts than the non-allied dyads like Turkey and England. The alliance gave the two countries more military power, as they were able to help each other when they aggressed and were aggressed. This support structure gave greater opportunities for the allied dyads to attack. Thus, we can see why allied dyads get into war five times more than non-allied dyads. (Introduction to International Relations student, University of Maryland, Winter 1999–2000)

Taken together, these six opportunities for teaching during simulations enable the instructor to go far beyond the value gained through the "doing" and allow the simulation experience to be exploited throughout the class. In the following section, I briefly describe three simulations that, combined with the pedagogy described above, can be used to teach several different IR theories. Before describing the simulations, I should note that the assumption has been made that readers are familiar with the theories discussed. To clarify certain approaches to the international system for the reader, Table 1 briefly summarizes the various theories discussed.

Simulations and Games

All the simulations listed here have been used repeatedly and successfully by the author and others. In addition to the descriptions given in the text, an online appendix of power point slides explains all the rules of the games and provides

TABLE 1: A Brief Look at the IR Theory Being Used

	Classical Realism	*Neo-liberal Institutionalism*	*Neo-realism*
Key questions	• Why is there a security dilemma? • Why is there war?	• Why is there cooperation? • How does cooperation sustain itself?	• Why is there a security dilemma? • Why is there war? • Why is there Balance of Power?
Key assumptions	• State's key interest is survival. • Anarchy is dangerous because: "In the nature of man, we find three principal causes of quarrel. Firstly, competition; secondly, diffidence; thirdly, glory." • There is no hierarchy to enforce order. • Survival is the key goal.	• State has many interests. • An awareness of self-interest can lead to cooperation. • Institutions can formalize arrangements and provide assurances of future cooperation. • Maximizing self-interest is the key goal.	• State's key interest is survival. • States are Rational Unitary Actors. • Anarchy exists without an enforcing power to create order. • Differences in Power are the key differences between states. • Power is the key goal.
Simulation that models theory	Classical Realism game	Prisoner's Dilemma to the *N*th Degree	Diplomacy

debriefing questions that can be used to present these activities to students. It may be downloaded from http://www.albany.edu/rockefeller/pos/faculty_2/asal.htm.

The Classical Realism Game

To play the game (whose name should not be revealed to the students before it is played) with between 15 and 30 students, the instructor should be equipped with two decks of cards and, optionally, enough dice to give one to each student. Alternatively, students can use "rock–paper–scissors" to determine their fate. (Familiarize yourself with the rules for this game in case they need to be explained to students.) Each student is given a card and a die. You should say to the students (or display on a power point or slide):

"The object of this game is to survive. If your card is taken from you, you die. You can take someone's cards by challenging them to a duel. A duel is carried out by each student throwing their die (high roll wins) or playing a round of rock–paper–scissors. The loser dies and the winner gets his/her cards. If someone challenges you, you must fight. Until the deck runs out, I will give one card to anyone who has died to 'bring him or her back to life.'[5] Once the cards have all been distributed, if you are killed, you stay dead. Go to it."

Sometimes students are reluctant to start playing but a word or two of encouragement is usually enough to get them started. After having run this game more

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[5]One reviewer pointed out that the possibility of extra lives makes the game an unfair test of Hobbes because people are encouraged to be less risk averse. While I take this point, the extra life option encourages them to start playing quickly. I have run the game several times without giving out extra cards and it seems to work just as well. One should feel free to remove the optional extra lives for a stronger model of Hobbes anarchic system.

than two dozen times, I can say that in my experience, the students invariably start challenging each other and "killing" each other until only two people are holding all the cards and are about to fight each other. If they do not call it quits at this point (and they sometimes do) I ask them a very simple question. "Why are you going to fight?" Their response is usually either "to win" or "to guarantee my survival."

At this point I stop the simulation and ask all the students what the goal of the game was. Usually, an initial response is "to get all the cards." Other students will point out that the goal was to survive. I then ask whether fighting in any way increases their chance of survival. It soon becomes clear to the students that fighting has the opposite effect. Rather, the smart strategy is to try and avoid all conflict because getting more cards, according to the rules, does not make you any safer.[6] Next, I ask what motivated them to fight? After a brief discussion, I hand out a copy of excerpts from Hobbes' *Leviathan*: *Chapter Xiii Of The Natural Condition Of Mankind As Concerning Their Felicity And Misery*[7] (Hobbes, 1996).

Discussing the game again after the students have read the lines, ". . . in the nature of man, we find three principal causes of quarrel. First, competition; secondly, diffidence; thirdly, glory" (Hobbes' 1996:220). I have found the simulations to be a very effective introduction to the individual level realism that is found in Hobbes. The students find their own behavior an intriguing, and at times disturbing, case upon which to apply Hobbes' theory of realism and the effects of anarchy. That the students fought for glory (getting the most cards) despite the fact that it is against their best interests makes them take Hobbes' emphasis on glory as a motivation more seriously than they might have otherwise. While a very simple game, students have often returned to the results of the game throughout the semester, drawing analogies with historical cases that we discuss.

This simulation is also used productively with another game called "Balance of Power" (Chapin, 1998). In this simulation, the students are divided up into teams with the same goal as in the Classical Realism game, but in this case, each team has varying strengths and as they battle, teams can form alliances. Comparing the motivations for their actions in this simulation to those in the Classical Realism game can lead to interesting discussion comparing the realism of Hobbes, Morgenthau, and Thucydides (Vasquez, 1996).

As a side note, I usually use the Classical Realism game on the first day of class. It makes productive use of what is often considered dead time educationally because the students have yet to read anything. It also serves as an icebreaker among the students (especially if you insist that they can only challenge each other by name). In addition, it creates an instant discussion where students, having all gone through the same game, feel empowered to talk.

This game is low cost both in terms of preparation effort and material, and like all the simulations I recommend here, I have found it effective in my teaching. The only thing the instructor needs is a deck or two of cards and a handout from Hobbes. The game can be played with many more people if you forgo the use of dice (or purchase a large supply) and use rock–paper–scissors[8]. I have used this game several times with groups of over one hundred students and it has worked successfully.

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[6]While I cannot guarantee it, based on much experience, it is very rare for a student to adopt this strategy.

[7]If this chapter is not part of a reader that you are using, you can obtain the text for your students from a variety of online libraries that provide *free* access to various classics including Hobbes, Thucydides, and Aristotle. Any of the following sites are worth exploring: http://books.mirror.org/gb.titles.html; http://digital.library.upenn.edu/books/; http://etext.library.adelaide.edu.au/aut/.

[8]A history and the rules for rock–paper–scissors can be found at http://www.straightdope.com/mailbag/mrock-paper.html

Prisoner's Dilemma to the Nth Degree

In this game, the students are paired off[9]. Explain to them that their goal is to get as many points as possible. I start out by running them through a series of games where they start by playing a non-iterative round followed by a second round of iterative games and they strive to get the most points total over three rounds. A third round of iterative games follows this, where I do not tell them how many rounds there will be. After this round I stop and discuss the issue of shadow of the future. In the fourth round I vary the payoffs through several iterations and then discuss the effect of changing payoffs. This round can also be used to familiarize the students with other classic game theory games, like chicken, if the payoffs are changed in accordance with the desired model. I then put them in larger groups varying in size from 4 to 12 or more with the rule that a defection by anyone in the group works as a defection against all of them. This fifth round of iterations is used to illustrate the effect of increasing the number of people playing (Oye, 1986).

Finally, I put them all into one large group with one rule change. After each round, the group as a whole can vote someone out of the group. Whoever is voted out of the group no longer plays with the people in the group but only against those voted out. Since those voted out are invariably the ones who have defected in the last round, the cast-off group tends to be rife with defection. The original group, after several people are voted out, becomes a large dependable group where its members consistently cooperate while the outside group tends to repeatedly defect on each other.

Next, I ask the students to apply the theory of neoliberal institutionalism to this last round. The students (sometimes quickly and sometimes slowly) come to the realization that the group that consolidated around continued cooperation is in effect an institution (Axelrod and Keohane, 1986). On more than one occasion, I have seen diehard realists struggling with the logic of the neo-institutional argument given that they have just participated in an experimental proof of it. The game is extremely low cost and takes a minimum amount of time. Besides shedding light on neo-institutionalism, it also helps students to have a much better grasp of game theory.

Diplomacy

Diplomacy is a board game now being produced in the United States by Hasbro.[10] There is a large group of hobbyists who play it and if your students are interested, there are resources on the internet that discuss everything concerning it, from military strategy to the best way to negotiate.[11] What is important about Diplomacy, though, is that its rules mirror neorealist theory so closely that it has been used in experimental research to explore balance of power theory (Van Belle, 1998). The

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[9]Prisoner's Dilemma is a classic game theory game used to model certain types of strategic interaction. The game is strategic because the payoff each player gets is dependent not only on their own actions but also on the actions of their partner. Basically, two partners-in-crime are arrested and put in separate rooms. Each can decide to stay quiet and be loyal (cooperate) or rat out their partner. If both keep quiet, they will both go free. If one rats the other while the other cooperates, the defector goes free while the other gets a long prison sentence. If they both rat each other out they each get a shorter prisoner sentence. Given the uncertainty, the need for simultaneous action, the high level of impact they can have on each other, and central place of trust, the game has been used to model all sorts of international interactions (Starkey, Boyer, and Wilkenfeld, 1999:96–98).

[10]http://www.wizards.com/default.asp?x = ah/prod/diplomacy

[11]By far the largest website covering Diplomacy and its various permutations can be found at http://www.diplom.org/ Here you can also find copies of the map board, which can be printed out and given to the students for negotiation purposes.

objects of the game are (1) to survive and (2) to be the most powerful nation in Europe. Students are divided up into the seven powers of Europe before WWI. Each turn is made up of a round of negotiation and a round of movement. Van Belle describes the mechanics of the game as follows:

> Diplomacy provides a simulation of a complex anarchical environment where the three core assumptions of Realism, which can be roughly derived from the works of both critics and proponents . . . are represented. Those three assumptions are: (1) Rational Unitary Actors. (2) Anarchical Environment. (3) Power as the Fundamental Resource to be pursued . . . These actors then interact in an environment that is roughly analogous to an anarchical international environment . . . Diplomacy simulates an anarchical environment by having the moves of all seven players submitted simultaneously and providing no overarching authority to enforce agreements between players. The participants all make their choices without foreknowledge of the others' moves for that turn and they have no assurances that agreements will be kept. A relatively simple set of rules governs how the military units can be moved and how their power can be combined through support orders. Conflicts over territories are resolved based solely upon the power (number of military units) each player applies to the specific goal (territory) being pursued. . . .
> The general play of Diplomacy involves the strategic maneuver of military units to capture resource production centers. Of the seventy-five provinces on the simulation map there are thirty-four that are designated as production centers, each roughly representing a major European city . . . Changes in power are determined by the net gain and loss of production centers at the end of each game-year . . . At the end of the game-year, the number of military units controlled by each player is adjusted to match the number of supply centers owned. If a player has no supply centers at the end of any game-year, all of his military units are removed from the board and he is eliminated from the game. (Van Belle, 1998:270–271)

The rules are straightforward[12] (and the rulebook is well done). What really demands an adjustment from the students is that the moves are simultaneous (at the end of the negotiation period, each team writes down its moves and they are all read together) and no one is bound to keep their word. No power is strong enough to survive by itself but every ally is a possible threat and no promise is guaranteed. As the author of the game has noted, "the notion that a person may tell all the lies he wants, cross up people as he pleases, and so on (which makes some people almost euphoric and causes others to "shake like a leaf"...) came about almost incidentally, simply because it was the most realistic situation in international affairs . . . ." (Calhamer, 1993). I have repeatedly observed the euphoria and shaking that Calhamer describes. Another typical reaction, especially from students playing the surrounded states of Italy or Austria, is that the game is unfair. My typical answer is "true." Diplomacy is very successful at conveying to the students the realist vision of anarchy: an unfair dangerous nasty place where paranoia is a healthy state of mind.

Diplomacy presents a number of challenges that the Classical Realism game and the Prisoner's Dilemma to the *N*th Degree do not. While both of those games can be played with many students (I have done each with over one hundred students), Diplomacy cannot be so easily extended to such a large group. I have found that the maximum size of a team is about four or five, which allows up to 28 students to be engaged around one board. On several occasions, I have run two games simultaneously but I have found this to be very challenging and generally possible only if I can draft a student to act as an assistant. While the cost of the other two games is minimal in terms of preparation and money, Diplomacy requires purchasing the game as well as investing time to understand the rules and explain them to stu-

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[12]The rules are also outlined in the online appendix.

dents. In addition, Diplomacy requires a serious investment in class time—at least two to three hours for a short game. The nature of the game can be an added challenge because countries can be eliminated from the game, creating a problem of what to do with the students who were playing those countries. I have dealt with this by having eliminated players join the team of the country that has eliminated them, which creates some interesting dynamics in its own right.

If Diplomacy requires such a serious investment of time on the part of the instructor to learn the rules well enough to act as arbiter and explain them to students as well as a serious commitment of class time, is it worth the investment? I believe that it is. After playing Diplomacy, students have a tendency to develop very strong feelings about realism—both pro and con—and discussions of whether or not the game is a true reflection of reality generate fierce arguments. In reaction, one of my students wrote what he called the "ten commandments of Diplomacy" that included for example: "honor your mother and father but trust no one else, and unless your parents are far away, don't trust them either" (The Arab–Israeli Conflict student, the Hebrew University of Jerusalem, Summer 1995). Of all the simulations I have used to teach IR theory, I have used Diplomacy the longest. Over 15 years of usage, it has created some of the most fierce academic (never mind diplomatic) arguments I have had in my classroom. I consider this a very good thing.

Diplomacy is also a useful example of how learning can come from all six stages of the simulation process discussed above. In preparation, students are asked, when they read the rules, to think about the theoretical model of the world they reflect and to write down predictions about how the game would develop based on the map board. While playing the simulation I often take students aside to discuss their thoughts and ask them how their thinking might match up with Hobbes, Morgenthau, Keohane, or some other IR thinker. When some particularly significant development occurs (for example the collapse of a long-term alliance) I have paused the game and conducted mini-discussions about how this development validates or invalidates a particular theory, and how realistic the actions of the players might or might not be.

Debriefing the game has been a pleasure. I usually ask the students to discuss first in their teams how they saw the game develop and then share their narratives. The sometimes strikingly different narratives that are shared serve as a useful starting point for discussing a variety of issues. What I have found so rewarding about these debriefings is that more often their theoretical content is student driven. For example, the stark difference in narratives has led students to discuss the difference between a state level of analysis and a system level of analysis and their comparative worth. I always like to end the oral debriefing by asking the students how realistic a model Diplomacy is for the real world. In written debriefing and as cases to be referenced in examinations, Diplomacy has served as a useful way to have students compare the game to cases they have read about and the theories that are used to explain them. As illustrated by the examples above, comparing Bremer's (1996) research on dyads to the game can produce well considered pieces that force students to think carefully about what they read and to provide answers that go beyond regurgitating what they have read.

Conclusion

Beyond the benefits that each simulation can provide educationally, asking students to compare two simulations can give them added insights as they compare not only divergent theories and cases but also two different simulation experiences. An example using this approach would be an exam question such as "Compare and contrast the interactions in Classical Realism game to those in Diplomacy. Use these two simulations and a case to support an argument about which theories most

TABLE 2: A Comparison of the Simulations Presented

All Simulations are Considered by the Author to be Effective	Classical Realism	Prisoner's Dilemma to the Nth Degree	Diplomacy
Cost	Low $3–5	Non-existent	Medium $40–60
Outside support available	No	No	No
Preparation time by professor	Low	Low	High (you need to know the rules)
Preparation time by student	Non-existent	Low	Low (they need to read the rules)
Simulation time	10 min	30–60 min	2–5 h, not all of which needs to be class time for one or two games.
Complexity of interaction	Low	Low to medium	High
Theories that can be explored*	Realism	Neo-liberal institutionalism, game theory (theories of cooperation under anarchy)	Realism, Neo -realism, theories of conflict

*All these simulations can be used to explore aspects of negotiations but that is not the focus of this article. They also can be used to explore constructivism by focusing on the constitutive rules. Finally, they can be used to explore Marxist and Neo-Marxist theories by focusing on "what is missing."

accurately depict the international system." Such a question helps students tie together readings, activities, and analysis in a very productive fashion.

In addition to the theories each simulation directly addresses, a simulation can be used to discuss other theories of IR by focusing on what they leave out or how they are constituted. The use of rules allows for an interesting discussion of the constructivist implications of agreed upon rules and the behaviors they engender. Comparing the rules of Prisoner's Dilemma to Diplomacy takes on a different color once the students have read Wendt's (1992) "Anarchy is What States Make of It."

Each of the three simulations individually, when combined with the pedagogy outlined, can serve as important adjuncts in the teaching of IR theory. Each of the scenarios has its advantages and disadvantages in terms of cost, complexity, theories covered, and support given. (A comparison of these appears in Table 2.) Depending on constraints, the different simulations presented here will be useful to different instructors. Two factors are key in deciding which simulation, if any, to use: (1) the degree to which the simulation models the theory being taught and (2) the extent to which the simulation can be tailored to match the instructor's style and needs. Given these factors, the ability of simulations to provide so many new points of learning makes them a valuable addition to the teaching of IR theory.

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