

*Simulations In The Teaching of
Diplomatic and Military History*

by

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The use of simulations as a teaching tool is not new. Simulations have been used in a wide variety of settings, including high schools, some specialized graduate and professional schools, "think tanks," and, of course, in the military. Yet their use at the college level has been, at best, limited, and many college faculty, especially historians, are skeptical of their use in the classroom.

The basis of this skepticism is sound and should not be ignored. The main issues that concern historians are accuracy, utility, and time. First, game simulations of historical events, while usually based on some research, may not be completely accurate, in which case the use of the simulation may do more harm than good. A game simulation can hardly take into account all factors relevant to a particular event and, equally importantly, may not be able to quantify them in a useful way. Second, instructors may question the utility of a simulation, wondering in the experience will actually help achieve course goals, or merely provide students with a (hopefully) pleasant interlude.

Finally, game simulations are often viewed as a mediocre way of consuming scarce academic time. History courses are not noted for achieving their chronological goals. Lecture time is a limited commodity (from the viewpoint of the instructor, not the student). Moreover, since this generation of students is not oriented toward reading, it is necessary to devote considerable class time to discussion and analysis of assigned readings - not only to determine if the readings are being done, but to give students the skills necessary to analyze texts, documents, etc., and to turn them away from unthinking acceptance or casual rejection of what they read. Assignment of and testing over readings is no longer enough. This places even more pressure on allocation of course time and increases skepticism about the use of simulations.

In a sense this is unfortunate, because the well-designed use of simulations can contribute significantly to student knowledge and understanding. Simulations can educate students on a factual level in a more vivid fashion than lectures and texts alone. Simulations can also help place students in the position of participants and decision makers. Most importantly, there are certain concepts that are often highly abstract to today's students that can be more easily taught via a simulation. Balance of power politics can be described in speech and writing, of course, but students often remain confused about particular events and national behavior during those events. Often I have described carefully (I hope) a nation's decision to go to war, or to make peace, and am still faced with questions of the, "but I still don't understand" type. A correctly used simulation can help students understand complex situations, and hopefully further

stimulate their interest as well.

The key phrase here is, "correctly used." No game simulation use will be particularly successful unless the instructor has a clear idea of the purpose of its use. Again, this can include understanding of concepts, awareness of factors, basic historical knowledge, or even such basic facts as simple regional or world geography, a field in which I have found that not all of my students arrive fully versed. Unless the instructor has a clear idea of the reason for using the simulation, it is highly doubtful that it will be a successful experience.

The breadth of simulations available ranges across virtually every discipline, field of history, and level of education, although, again, the collegiate level is still not well represented. Simulations sometimes combine history with another discipline, such as Robert Schenk's macroeconomic simulation of the Great Depression.¹ Although war and war-related games dominate the commercial market, many other alternatives are available. Simulations are available for Indian treaties,² The Constitutional Convention, the Missouri Compromise, the treaty of Guadalupe Hidalgo, the Compromise of 1850, the Kansas-Nebraska Act, secession, the impeachment trial of Andrew Johnson, the Scopes trial, the Alger Hiss case, the decision to drop the atomic bombs, Mississippi in 1964, and Watergate,³ to name but a few.

Many of the above simulations, however, were prepared with school pupils in mind. There is a trend, however, to develop simulations for the college level as well. A relatively recent example is the Sargent/Hueston American revolution simulation, co-designed by a college instructor with his classes in mind.⁴ This would not be the first time that college history professors have adapted to a changing environment, including a certain lack of interest among students and challenges from other social sciences. In the past, historians have borrowed ideas and terminology from other social sciences.⁵ Adoption of occasional simulations would be a far less radical step, especially if it succeeds in stimulating students' motivation levels, empathy with historical actors, and insight into the historical process.⁶

The latter can be accomplished even if the simulation leaves important factors out of consideration. Inclusion of all known factors will always be a problem, and many historical occurrences and trends will be extremely difficult to convert into numbers.⁷ One of my students, for example, was unhappy because a particular war game failed to take into account that one side was fighting for its own land and homes. Yet this student revealed by her comment that she was sensitive to the larger setting in which the simulation had been placed. So long as participants in the simulation are aware of its inherent shortcomings, the simulation can still be useful. Furthermore, some game designers do attempt to incorporate social and economic conditions into conflict simulations.⁸

The teaching of the impact of various factors is probably the most important outcome of a classroom simulation. "History games and simulations are based on the concept that within any historical situation a framework of factors can be identified." The instructor should identify those factors which students are expected to learn and understand, because the "precise function of the game in the teaching of a topic needs to be thought about."⁹ As a practical matter, the instructor will have to rely on the relative values assigned to the major factors. This may be frustrating in certain circumstances, because

"[p]erhaps no two historians would produce the same data base."¹⁰ As a result, the most complex and global simulations are not always the best. Not only will the class get lost in a morass of rules, but essential points will get lost as well.

This can be prevented, once again, by achieving clarity of purpose regarding the use of the simulation. The typical simulation does introduce students to at least a basic level of factual knowledge regarding a particular event (although this would not be the case for a simulation that tried to teach an abstract concept). More importantly, perhaps, a simulation can motivate students to investigate further the events under study.¹¹ This is absolutely vital. Students benefit from a simulation primarily if it does expand their intellectual horizons, but, if it convinces them that all important knowledge regarding the event is shown on a 24" by 36" mapboard, the simulation is in reality a failure. Even a conflict simulation can raise students' awareness about the social, economic, and political factors surrounding diplomatic and military events.¹² In fact, positive student response to a simulation can be linked to a heightened understanding of a situation's complexity and background, especially if it involved linkage between their own decision making during the simulation and classroom learning.¹³

Conflict simulations are of particular interest in classroom use because they benefit from a level of sophistication resulting from their long history. While the precise age of chess, the world's most venerable strategy game, is unknown, Sumerians and Egyptians did play war games with miniature soldiers, although it cannot be certain whether this was for entertainment, education, military training, or all three. The modern history of war games begins in the 17th century, when a number of chess variants were designed. The first true war game, however, a 240-unit game played on a 1,666 square board, dates from 1780 and, inevitably, was invented by Germans, as was an equally important successor created in 1795, the first game to be based on "real" territory (the Franco-Belgian border).¹⁴

It was also the German (Prussian) army which introduced the world to war games as a training and teaching tool. In 1824, the Chief of Staff was invited by a young officer and war games enthusiast to witness a war game demonstration, which was so successful that the game was distributed as an official teaching tool to each regiment. Criticisms of the game have a modern ring; the rules were too complicated, and the game was unrealistic because of omitted factors. Eventually the young officer who had invented the game committed suicide. War games continued in use in Germany, however, spreading to virtually all armies after Germany's victory over France in 1870-71. Two cases familiar to 20th-century military historians proved the games' utility, if only in a negative sense. In 1914, the Russian army carried out a plan of attack shown to be flawed by a war game. Failure to change the plan led to the catastrophe at Tannenberg. In 1942, a Japanese naval war game demonstrated the risks in the plan for the attack on the island of Midway; the "American" team won the game. The supervisor of the game, Rear Admiral Ugaki, reversed the results. Unfortunately for Japan, he could not do the same for the actual battle.¹⁵

The Games

The selection of simulations for conflict settings is complicated primarily by the multiplicity of options. The actual choices discussed in this paper were dictated by the

courses in which they were used, and were, in fact, very different. Few adult games have demonstrated either the continuing popularity, or the versatility, of Diplomacy. Diplomacy particularly commends itself for use in classroom simulations because it can be used to teach balance of power concepts, basic strategy, the dangers of either excessive aggressiveness or total passivity, the possibility of conflict even where it is not particularly beneficial for participants, and the problems faced by national leaders attempting to make rational strategy decisions. It can help teach students basic European geography, and in a peripheral way underlines the economic aspects of war and imperialism (strength is based on a nation's possessions).

Oddly enough for such a versatile game, Diplomacy is relatively simple, perhaps explaining its three decades of popularity.¹⁶ Diplomacy has only two types of units (armies and fleets), two types of territory (land and water), three possible types of action (move, support, and convoy), and a total number of pieces barely greater than used in a chess game (34).

Despite this relative simplicity, Diplomacy is actually a complex game to play and win. Set in 1900 (with variants for earlier periods), the game has 7 players, representing Britain, France, Germany, Italy, Austria, Russia and Turkey. There are no dice. No power can win the game without help, which means alliances must be made (and often concealed). The ideal alliance, of course, is one that commits your partner(s) to everything and yourself to nothing. The game is won by capturing 18 of the 34 so-called "supply centers" on the board. The 7 players are finely balanced, with each having geographical advantages and disadvantages.

The game Stalingrad, on the other hand, is far more "traditional." Attempting to simulate the Eastern Front in World War II, it uses a typical war-game board divided into hexagonal spaces, numerous different types of units (infantry, armor, cavalry, with an astonishing number of variants based on strength, speed, etc.), and all sorts of different factors to determine the outcome of combat (terrain, weather, etc.). The Germans have to capture Moscow, Leningrad, and Stalingrad to be declared victors in the game.

Stalingrad is a fairly "old" game by today's standards, having been designed 30 years ago, and is considered to be part of the first generation of commercial war games.¹⁷ As such, despite revisions, it has not benefitted much from the wealth of recent research on the Eastern Front. One critic states that "it is not a good wargame," and attacks its "total blindness to any semblance of history."¹⁸ While these criticisms may be excessive, those interested in using a Great Patriotic War simulation might want to consider a game specifically designed for educational use, German Eagle vs. Russian Bear, which includes factors such as defense production, industrial plant evacuation, Lend-Lease, and partisans.¹⁹

Diplomacy

(a) The Process

Diplomacy was used as a simulation in a course on 19th century Europe that covered the period from 1815 (end of the Napoleonic era) to 1914 (outbreak of World War I). The

ethnic problem in the Austrian Empire, the crumbling monarchy of Turkey, militarism in Germany, and the manifold problems of the Russian Empire are not considered. Diplomacy does a commendable job, however, of teaching basic balance of power problems. Students become familiar with strategic problems inherent in geography, including Turkey's limited options, Germany's dangerous central location, Britain's dependence on naval superiority for survival, Italy's near-inability to conduct offensive operations, Austria's need for solid alliances, and Russia's difficulty in defending its long frontiers. Interestingly enough, student knowledge of history does not seem to prevent conflict between Russia, Austria, and Turkey in the Balkans.

The class was divided into 7 teams of 3 persons each. Diplomacy has two "moves" per "year". The game begins in the Spring of 1901. Two moves were made each week for eight weeks. As the class met five times a week, it was possible to schedule two twenty-minute game periods a week. Intense diplomacy assured France of victory, although Austria and Russia turned in very creditable performances:

"Supply Centers" Held by Each Country

COUNTRY	Start	1901	1902	1903	1904	1905	1906	1907	1908
Britain	3		4	4	3	1	1	-	-
Germany	3		4	5	6	5	6	7	5
Russia	4		4	4	5	7	7	7	8
France	3		5	6	6	7	8	9	13
Italy	3		4	4	3	3	3	3	1
Turkey	3		4	4	4	3	2	1	1
Austria	3		5	7	7	8	7	7	7

Alliances were extremely durable, and players proved to be adept at remaining in the game, and holding in check anyone who threatened to grow too powerful - except the French.

(b) The Survey

The students were required to complete an anonymous survey consisting of 3 parts - an evaluation of their experience, an evaluation of the game, and a brief narrative history of the game. Part I asked students indicate whether they communicated outside of class (12/17 = Yes), an indicator of interest and participation. Students were also asked if they personally wrote orders (Diplomacy players simultaneously submit their decisions in writing) (8/17 did), negotiated with other countries (11/17), or issued threats (only 4 players did so). Players were then asked to indicate countries with whom they made alliances. Interestingly enough, the answers within teams did not always match.

One team made no alliances (Britain, which was destroyed). Seven of 17 players indicated their alliances were kept secret from nonmembers, a somewhat lower than expected ratio. Ten of the players experienced personal feelings of hostility toward others, which is also at the low end for this particular game. Eight stated that they had

been stabbed in the back by allies. Player evaluations of other teams' play, as well as their own, did not agree by any means, which reflects the "real-world" need for defining "victory conditions" (*Diplomacy* is a game in which it is perfectly respectable to play for 2nd or 3rd place). One player thought all had done well for a first-time experience, while another applied that view to everyone, except Britain, the only non-survivor.

Part II called for an evaluation of the game, first numerically, then qualitatively. Students were asked to rate the game in terms of its "value" in learning 11 different items. The rating scale was 1-5, with 5 being the most valuable. Individual evaluations were also averaged. The last questions, 10 and 11, were included as "controls" because the game could not have contributed significantly to knowledge in those areas.

AREA	AVERAGE RATING
1. Basic geography	4.41
2. Basic strategy	4.12
3. Understanding negotiations	4.24
4. Learning conduct of negotiations	3.82
5. How misunderstandings occur	3.94
6. Danger of aggression	3.82
7. Danger of passivity	4.06
8. European diplomatic history	4.71
9. European military history	4.24
10. European social history	3.24
11. European economic history	3.00

Student individual averages of all scores ranged from 2.73 to 4.91. Averages of team scores did not correlate with game outcome. The highest average rating (4.41) was submitted by the least successful team, Britain.

Students were asked to state their overall reaction to the game, particularly its utility as a teaching tool and the amount of time devoted to the game. As far as substantive learning was concerned, players indicated they enjoyed the vicarious experience, saw parallels with the study of the balance of power in class, and, in one case, indicated a more sympathetic understanding of one particular statesman (Bismarck). Most criticisms of the game were procedural; some students felt that there was insufficient opportunity to participate, and, in two cases, felt that the rules were hard to understand (in both cases, representing teams that had lost opportunities because of rule-related errors). One player indicated that the game was "great because we won."

Finally, students were asked to write a brief narrative history of the European war in which they had just participated. The results were as expected. With only a couple of exceptions, students recalled exclusively their own country's position in the war, without much recall or understanding of other countries' situations. Some things apparently never change.

Stalingrad

(a) The Process

Stalingrad was chosen as a simulation game in a special topics course covering the era of the two world wars. The undergraduate group was divided into two teams; five graduate students functioned as "umpires" and assisted with the rules, resolved conflicts, and ensured compliance with all procedures. Both teams were instructed to develop, on their own, a "command structure" which would divide the workload according to functions, regions on the map where forces were deployed, etc. The team that did this most effectively won the game. Stalingrad was played on four consecutive days, as no interim time for negotiations was needed.

Stalingrad was played in "months," with the Axis player moving first. Much of the first day was consumed with deploying the enormously complex armies. The better organization and delegation of the German team, while actually leading to initial caution, eventually turned into a beneficial factor. Knowledge of rules also influenced the outcome. For example, the Red Army players forgot to move a force from a frozen lake in the north; when it melted, several divisions drowned. The game ended in August, 1942, with the Soviet Union compressed in an area around Stalingrad, and the umpires unanimously declared the German team the winner.

(b) The Survey

All students were again required to complete a survey. Although the surveys were not anonymous, critiques were surprisingly more informative and critical than those on the anonymous Diplomacy surveys. Asked to state how they would change their team's organization, many players suggested restructuring the team to allow for more participation. The graduate student survey was, of course, structured somewhat differently. Graduate students were asked if they were or were planning to be employed in education (all were), how the game could be improved (more study of the rules and more opportunities for all students to be involved were the invariable suggestions), whether all players had wanted to be involved (3 said no, 2 said yes), whether all were able to be involved (4/5 said no), and whether any genuine hostility was observed (only 1 yes). On the substantive quality of play, four saw important errors (mostly by the Soviet team). Asked to critique team organization, two thought the teams were well organized, two did not, and one saw the Germans alone as well organized.

The second part of the survey asked all students to evaluate the game's value in certain areas, once again on a 1-5 (least-most valuable) scale. Averages were again calculated for each question, for each student, and for the teams.

AREA	AVERAGE RESPONSE
1. Basic geography	3.57
2. Basic strategy	3.91
3. Military history of the era	3.43
4. Problems faced by the Axis	4.17
5. Problems faced by the USSR	4.13

Student average scores ranged from 3.00 to 4.83. There was some variation according to game role. The victorious German team averaged 3.94 (ranging from 3.00 to 4.83), the Soviet team averaged 3.75 (ranging from 3.00 to 4.67), and the 5 graduate umpires averaged 3.60 (ranging from 3.00 to 4.50).

Evaluations of the game as a teaching tool were positive, but four students (including 2 graduate students) gave qualified or negative opinions, in all cases because of problems related to difficulties experienced by some players in participating. A number of students did express a feeling that their knowledge about the Eastern Front had been enhanced, although one (as mentioned earlier) was annoyed that the Red Army's defense of the homeland was not factored into the game.

The third part of the survey (narrative) revealed the same concentration on one's own side that had appeared in Diplomacy. The graduate student comments revealed the very interesting fact that the German team had apparently learned from text and class study of the war and modified its approach accordingly, while the USSR team had not done so. I cannot assign any reason for this anomaly, except that most traditional sources on the Eastern Front war view the outcome - erroneously, in my opinion - as the result of German mistakes. Perhaps history did not influence this simulation, but historiography apparently did.

Conclusion

At the outset, I suggested that the three main concerns among historians about classroom simulations were accuracy, utility, and time. Were these game simulations sufficiently successful to respond to these concerns?

In terms of accuracy, Diplomacy fares quite well because it does not pretend to recreate more than the most basic outline of the balance of power struggles in late 19th century Europe. Stalingrad does reasonably well, according to the class response, in showing the strategic problems faced by the combatants, and if the purpose of the game is limited to this point, it may be useful. Other simulations, however, may provide more accurate information about the actual history of the period.

The utility of the games was significant within the context of these particular courses. Stalingrad is primarily useful in a thematic military history course, but might have less to commend itself in other courses.

Neither simulation appeared to subtract excessively from class time, absorbing about 13% of the 19th Century Europe course, and 10% of the World Wars course. As a strictly arbitrary recommendation, I would make the 10% figure an upper limit for simulation time use. In the case of Diplomacy, the lessons that could be learned from the game had been learned about a week before the game's end, which would have lowered utilized course time to about 11%. Computer lab based simulations and other procedures could be used to encourage student to use non-class time for the games.

Not every course can profit from simulations, nor are most simulations useful for college-level instruction. Nevertheless, a well-planned and carefully chosen simulation can

be a positive and beneficial learning experience for today's students. If nothing else, the winning team(s) should prove fertile recruiting ground for history majors.

NOTES

1. Robert E. Schenk, Two Simple Macroeconomic Simulations and the Great Depression (Rensselaer, IN: Saint Joseph's College, 1980).
2. Russell Lawrence Barsh, Understanding Indian Treaties as Law: Peace and Friendship (Olympia, WA: Superintendent of Public Instruction, 1987).
3. See Richard W. Hostrop, United States History Simulations: 1787-1868 (Palm Springs, CA: ETC Publications, 1988).
4. James E. Sargent and Stephen P. Hueston, "Playing the American Revolution: A Historical Microcomputer Simulation," College Microcomputer 6 (May 1988), 165.
5. David Birt and Jon Nichol, Games and Simulations in History (London: Longman, 1975), 2-3.
6. Birt and Nichol, Games, 6-7.
7. Sargent and Hueston, "Playing the American Revolution," 168.
8. See for example, Richard Balaban, "Romans vs. Barbarians: A Simulation Approach to Learning," Social Studies (November/December 1982), 273-278.
9. Birt and Nichol, Games, 9, 141.
10. Sargent and Hueston, "Playing the American Revolution," 168.
11. Sargent and Hueston, "Playing the American Revolution," 165.
12. Balaban, "Romans vs. Barbarians," 273.
13. Sargent and Hueston, "Playing the American Revolution," 166.
14. Stephen B. Patrick, "The History of Wargaming," in Wargame Design: The History, Production, and Use of Conflict Simulation Games (New York: Simulations Publications, 1977), 2.
15. Patrick, "History of Wargaming," 3-5, 7-8.

16. Patrick, "History of Wargaming," 38; James F. Dunnigan, "The Business of Wargaming: The Economic Realities of Wargame Manufacturing," in Wargame Design, 131; Richard H. Berg, "Wargame Directory and a Suggested Library of Games," in Wargame Design, 149, 152.

17. Patrick, "History of Wargaming," 11; Berg, "Wargame Directory," 156.

18. Berg, "Wargame Directory," 145.

19. Louis R. Coatney, German Eagle vs. Russian Bear: A World War II Russian Front Boardgame Kit (Juneau, AK: Coatech, 1987), 5, 6, 13, 19 [microfilm ed. pp.].