YOUR BOSS, PLAYERS, AND SPONSOR

The Three Witches of War Gaming

Stephen Downes-Martin

In national-security war gaming there are three classes of senior stakeholders whom I call "the three witches"—critical to the success of a game but with the power to affect negatively its quality. These comprise, first, the war-game director's superior and chain of command; second, the senior players within each game cell; and third, the sponsor of the game and that officer's chain of command. Each of these three stakeholders frequently attempts to influence the design of the war game, even during play itself. For two reasons, such attempts amount to inappropriate interference. First, these stakeholders are not (usually) expert in war-game research, design, development, or production. Second, it is a conflict of interest for them to influence the game's design; such interference puts the credibility of the results into justifiable doubt. The director, responsible for delivering a quality game, must manage these three stakeholders throughout design, play, analysis, and postevent reporting to ensure that the game meets the sponsor's national-security-related objectives. Failure to do so puts the war-game director at risk of following the three witches to a fate analogous to Macbeth's.

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WHEN LEADERSHIP GETS IN THE WAY

Research into intellectual leadership indicates that it is extremely difficult for individual contributors in a discipline to return to primarily intellectual roles after having been in positions of administrative leadership for any length of time.[1] This does not mean it is "hard to get their old job back" or

that "it takes time to get back into practice." It means that after they have gotten their old jobs back as individual contributors they rarely perform as well as they did before they took leadership positions—in other words, acting in a significant leadership position often permanently reduces one's ability to perform at a previous job, now being performed by subordinates. This is one reason why the military calls some very senior leaders "general officers"—that is, "generalists"—which is to say, "not expert specialists anymore." They have become resource providers, managers, and leaders, but they are no longer expert at producing or doing what they once did, no matter how expert they once were.[2]

Research also indicates that senior people tend to be overconfident in their ability to control events that are in fact outside their own control, failing to realize the need for adapting their thinking to that reality. Their successful control of past situations leads them into the mistake of believing their competence applies to current situations, especially situations involving a high degree of chance.[3]

Even if these critical stakeholders were once war-gamers or war-gaming experts, time spent in the interim leading and managing organizations (which is what senior people generally do) instead of actually delivering war games results in decayed specialist knowledge and lapsed expertise. They have been consumers rather than producers of war games for too long.

There is also the problem of conflict of interest. Three risk factors have been identified as present in nearly all cases of scientific fraud. The perpetrators "knew, or thought they knew, what the answer to the problem they were considering would turn out to be if they went to all the trouble of doing the work properly; were under career pressure; and were working in a field where individual experiments are not expected to be precisely reproducible."[4] One must accept the possibility that all three factors characterize the stakeholders of any war game that addresses important national-security issues and thus that the stakeholders will have to be prevented from interfering inappropriately with the game's design and thereby be protected from charges of manipulating its results.

The war-game director must learn how to preempt problems with these stakeholders before they arise and what to do if preemption is unsuccessful. To succeed, the director must have three personal characteristics. Two are required for any profession, these being a high degree of professional expertise (in this case, in game design) and the moral courage, integrity, and poise, even charisma, to face down inappropriate interference from seniors—including his or her own superiors. The former trait will provide guidance as to whether the interference is justified or not. The third characteristic is a specific skill—ability to perform "objectives analysis," applied to the specifics of war gaming. Good objectives analysis with the sponsor is a necessary precursor to forestalling problems with all three of the stakeholders.

If the game director fails to display the courage and professional integrity required to manage these three stakeholders and instead follows their advice for the wrong reasons, then despite an initial appearance of all going well, the director will, like Macbeth, eventually end up in a very bad place. Acquiescing to inappropriate demands or advice can be the path of least resistance for the director (and sometimes the senior stakeholders) but comes at the cost of damage to national security and to the reputations of the director and the stakeholders, if the game was worth playing in the first place. The likelihood of this failure is highest when the director does not know enough about gaming or when distorted stakeholder motives are in play. Sponsors who discover later that game results are suspect will blame the directors, and rightfully so, even if it was sponsor interference that created the problem. Morally weak or incompetent directors are in effect gambling that sponsors will not realize that game results are corrupted before one or both of them have moved on to other duties.

THE FIRST WITCH: YOUR CHAIN OF COMMAND

War-game directors tend to be second-guessed by their bosses and other seniors in their chains of command—people ready, perhaps with the best of intentions, to help directors do a job at which the directors, but not they themselves, are expert. Furthermore, they often collaborate with sponsors to second-guess the director, to the point of demanding significant changes to design and execution even during the game itself. I have watched a senior leader in the game director's chain of command and the action officer of the sponsoring organization override the vigorous, analytically based objections of the game director and insist on game design changes in the middle of a major war game. The result was loss of information critical to the sponsor's objectives and inability to correlate information from before the change with that obtained after the change, leading to a serious reduction in the final value of the game products for the sponsor. The senior officers in the two chains of command did not understand the nuances and impacts of the changes, and they did not understand that they were no longer expert in game design and analysis. During game play there is not enough time for the director to educate senior stakeholders about the deleterious effects of midgame changes.

The director's only recourse if this happens during a game is to explain succinctly the likely adverse effects on game validity, the prospect of unknown unintended consequences from breaking the design in the middle of the game, and the necessity of documenting in the game report the source of the changes and their effects. The director then—if directly ordered to do so by the director's own chain of command—proceeds with the changes. The game director can reduce the likelihood of this happening in the first place by performing good objectives analysis with the sponsor and by keeping his or her chain of command informed

of the results of that analysis. All this requires that the director do a good job from the outset, be expert in all nuances of the game and its design, and have the courage to do the right thing for the sponsor.

The conflict-of-interest problems that facilitate intellectual fraud are present for war-game directors and their chains of command. These risks are removed for directors if they have no career stakes in the outcomes of games; if their organizations are "mission funded" (specifically, funding for the game is not under the control of the sponsoring organization); if their chains of command have confidence in their expertise; and if they are authorized by their chains of command to face down inappropriate interference from senior players, sponsors, or their own superiors—and are supported when they do so. War-game directors must be willing to execute their authority and be expert enough to distinguish inappropriate interference from justifiable oversight.

THE SECOND WITCH: YOUR SENIOR PLAYERS

The senior leaders of player cells, the cell "leads," have two roles. In addition to the obvious one of playing the game, they lead their cells in playing the game *as designed*. The game director recruits senior players with the knowledge, experience, and leadership skills needed to lead the cells; ideally, they are expert at their jobs, which are presumably relevant to the game's objectives. Senior players are chosen for their operations experience, not their game-design expertise. Being good at an operational task is not the same thing as being a trained and experienced analyst or an expert war-game designer.

Senior players will be tempted to redesign the game from the moment they turn up until the end of the exercise, but they are extremely unlikely to have the analytic skills to identify the downsides of a last-minute or in-play reworking of a game. Their ideas might have been good back when the games were being designed (or they might not). I have watched a retired three-star cell lead redesign a game during play and thereby seriously damage the quality of results provided to the active-duty four-star who was the sponsor because the director did not have the combination of skill and moral courage to challenge the cell lead on the issue. To claim that such things are matters of seniority is disingenuous. National security deserves better.

One way to avoid this problem is to recruit (not "invite") senior cell leads early, during the design phase, but after objectives analysis. The game director would meet with candidate senior players, explain the sponsor's objectives and game design, and explicitly call on them to lead their cells in playing the game *as designed*. It is at this stage that the game director can usefully incorporate into the design any good ideas the candidate senior players have. The director, however, must be

prepared to reject unsuitable proposals and even recruit different senior players if, in the director's judgment, candidates are unwilling to endorse the objectives and design or commit themselves to playing the game as designed. If for some reason a candidate senior player is simultaneously uniquely necessary to the game, very senior, and inclined to challenge the design to the point of endangering the sponsor's objectives, the director must put the candidate senior player in touch with the sponsor for resolution.

If notwithstanding all these precautions an accepted senior player attempts a redesign during the game, the director must point out that although the changes have obvious merit they interfere with the sponsor's objectives and then request that play be resumed according to the agreed design. If the senior player refuses, the director should bring the game to a halt and engage the command and the sponsor, informing them of the likely deleterious effects of the changes being insisted on and the requirement to document both the changes and their likely effects for the sponsor's objectives. Finally, the game director implements the changes, if directly ordered by his or her own chain of command.

THE THIRD WITCH: YOUR SPONSOR

Ideally, game sponsors bring to the table clearly articulated problems—issues of importance to national security whose elucidation legitimately involves war gaming. All too often sponsors bring instead either the task of implementing a poorly thought-out solution to a problem that has not been articulated (of which, at the fundamental level, a sponsor may even be unaware) or a desire to advocate some preconceived answer. Attempts by sponsors to influence game design in the latter case are clearly a conflict of interest.

There also exist *absentee sponsors,* of two kinds. Some are about to leave their billets, while others delegate games and their decisions almost entirely to subordinates while retaining the right to countermand those officers' decisions late in the timeline.

- First, military officers have limited "shelf lives"—they rotate fairly quickly out of the sponsoring organizations. A war game must be designed, executed, analyzed, and written up, and its results socialized by the sponsor in person, before the sponsor moves on, if the whole exercise is to have any effect. Although most senior officers serve in their billets for a year or two, a game might be initiated only a few months before its sponsor is to leave. If the sponsor plans to be fully engaged in the project, the time available for design, execution, analysis, and reporting is the period remaining until the sponsor's detachment, minus the time needed to use the results to influence the sponsor's audiences.

- Second, senior sponsors, who necessarily delegate most day-to-day game preparations to action officers from their staffs, are often so busy that they leave fundamental decisions to these officers, while retaining the right to change, at the last minute, decisions made or objectives agreed to by them. These principals being disengaged from the projects, their action officers effectively become the sponsors. Unless of sufficient seniority, however, these designees might not have the authority to make serious or speedy decisions, and in addition they might not fully understand the intent of their bosses.[5] In this situation the game director faces the likely risk of seeing the representative's decisions reversed late in the day, thus generating inefficiencies and damaging game quality.

I have had the experience of first being briefed by members of a sponsor's staff who—not believing it necessary for the game director to meet with the principal—explained to me the sponsor's highest-priority objective. I then refused to proceed further until I met the sponsor to confirm it. At the resulting meeting the staff and I heard the sponsor flatly contradict his staff as to what his number-one objective was and explain to me what his priorities really were. A game aimed at what the staff had claimed was the objective would have been completely unsatisfactory to the sponsor.

If sponsors persistently delegate discussions about games and objectives to action officers, it is the rotation dates of the representatives, rather than those of the principals, that mark the end of sponsoring organizations' interest in game results. Such sponsors thereby signal the relative unimportance of the games in their lists of priorities. The director's boss must then decide how important a project is to the gaming organization and whether its priorities for the game are the same as the sponsor's.

WHAT IS TO BE DONE?

Key to managing the three witches to avoid inappropriate interference and the ensuing damage to a game's results is objectives analysis by the game director. The game director must push for a first game-planning meeting with the sponsor *in person,* not just the action officer (however many staff members participate in that first meeting, and however many slides they use to brief the objectives). The game director's boss need not be present. Sponsors' degree of willingness to schedule detailed interviews with directors about proposed game objectives, or the ranks of action officers if the sponsors do not make themselves available, will say much about how serious they and their organizations are about the game. That in turn will influence the level of seriousness and allocation of resources the project deserves on the part of the gaming facility.

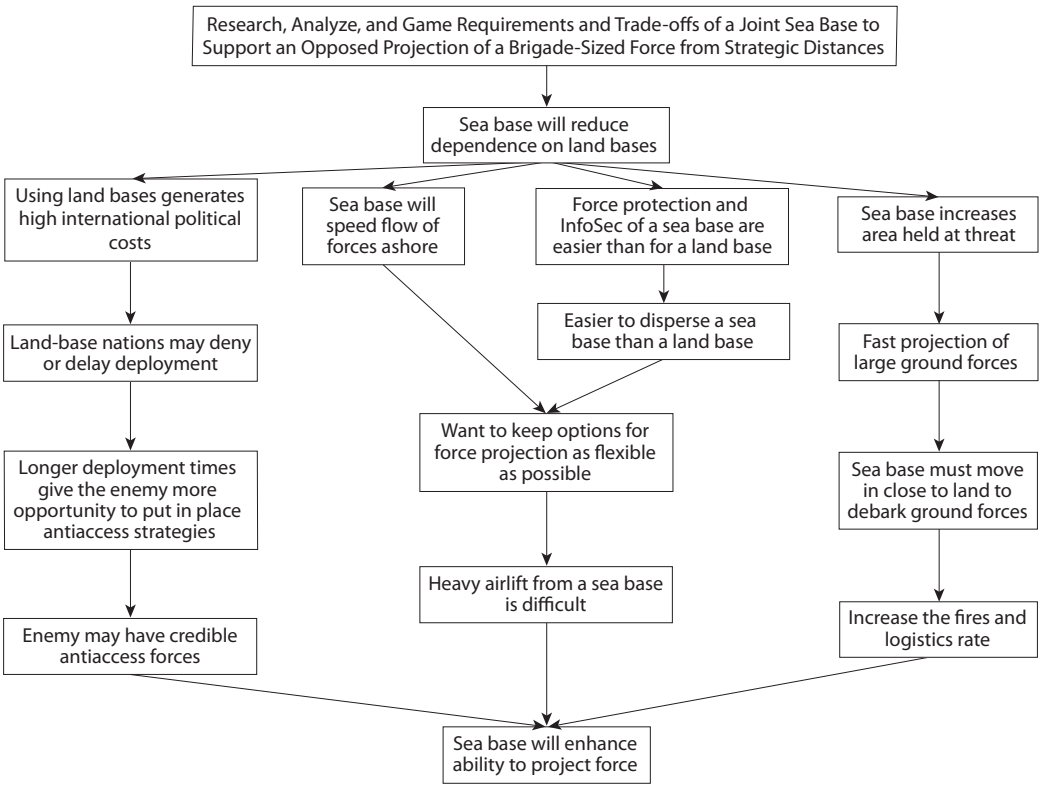
The game director's first task, then, is to identify the real objectives and their importance to the sponsor. Remember, the sponsor may be unaware of what these actually are. The approach is to ask four questions:[6]

- "What do you want?" This question is usually answered by sponsors' first communications with game directors' organizations. The sponsors state what they want, and the directors do not argue.
- "Why do you want it?" The game director explains to the sponsor that any objective is broad enough to cover a myriad of subtopics, only some of which would be important in this context. It is necessary to "drill down" to those that are of greatest interest to the sponsor, to ensure the game is focused on his or her priority needs. The process is equivalent to asking for the commander's intent. This is an art, interviewing and boring in until the game director has identified the priority needs of the sponsor. It is critically important to find out at this point who the sponsor's intended audiences are, who has stakes in the game's results, and when the sponsor needs the results in order to influence those audiences and stakeholders.
- "Why don't you have it?" The game director here searches out the reasons why this problem has not already been solved. Finding the root causes will draw out invaluable information about hidden agenda items, political and institutional pressures and imperatives, and previous attempts and why they failed, etc.
- "When are you rotating out of here?" The director also asks, "When is your action officer for this game rotating out?" The answer makes clear to the director and sponsor (or action officer) how much time is available for the game and for its analysis, report, and socialization, which in turn bounds the scale of the project and the level of effort devoted to it.

The game director must ask these four questions in the order given and in the presence of the sponsor's action officer. The very act of answering the first three makes the sponsor think through the objectives, the reasons for them, and the barriers to achieving them. Articulating all this, in turn, has three major effects. First, the sponsor and the game director now understand the problem better; second, both have better understandings of how important, or not, the game is to the sponsor and the sponsor's organization; and third, the sponsor's action officer (and through that officer, the rest of the staff) now understand the objective and mission.

Question 2, "Why do you want it?," is critical in that the sponsor's answers bound the problem and reduce the risk of "mission creep." During the initial interview the game director follows up each of the sponsor's answers to "Why

FIGURE 1
PART OF A "WHY DO YOU WANT IT?" DRILL-DOWN DIAGRAM FROM A SEA-BASING WAR GAME



do you want it?"—the sponsor is likely to give more than one answer—with such follow-up questions as "Why is that important to you, or to your stakeholders, or to [whoever else has surfaced]?" "What is it that is important about that?" This initial interview with the sponsor should last about sixty minutes. Knowing when one is done is an art. After about an hour the sponsor will have provided enough information to write up (for the sponsor) and diagram (for the game director's own use) the commander's intent for the game. The director then drafts a one- to three-page information paper for the sponsor to review and sign or to correct. If there are many corrections, there may need to be a follow-up interview.

When the sponsor and the game director have an agreed objectives document, it is useful to diagram it for design purposes (see figure 1, taken from an actual sea-basing war game). The diagram imitates the structure of the interview, although the interview usually jumps around more than the diagram would imply. The top node in the diagram is the answer to the question "What do you want?" Each successively lower node is an answer to the "So what?" question about the

linked claim pointing to it. For example, in answer to the question "Why is it important that force protection and information security for a sea base are easier than for a land base?," the sponsor of this game said, "Because it is easier to disperse a sea base than a land base." Asked why that in turn was important, he said, "Because I want to keep options for force projection as flexible as possible"—and so on. Note that the graphic result is likely to be a lattice rather than a tree. The paper should use not "PowerPoint Pentagonese" or cartoons but complete English sentences—nouns, adjectives, and verbs. In the diagram each phrase must make sense if prefaced with "This is important for our objectives because . . . ." For the game's designer, the nouns provide guidance as to what actors the game must represent (either by live players or simulation), the verbs as to what actions the actors are to carry out in the game, and the adjectives as to the characteristics of the actors and of their actions. Traditional "PowerPoint Pentagonese" and cartoons hide meaning and do not provide enough specificity or breadth to support effective game design.

The game director is now in a position either to design a game, to advise that something other than a game is needed, or to suggest that other approaches must be used as well to illuminate the problem. If a game is in fact to be played, the director is now equipped to think about the resources required—time, people, technology. The game director also has the information needed to keep the chain of command informed as the design proceeds, to keep the sponsor's action officer and staff from driving the design, to recruit senior players to lead the game cells, and to set up safeguards against inappropriate interference from well-meaning

FIGURE 2
SUMMARY OF RISKS BROUGHT TO THE WAR GAME BY INEXPERT SENIORS

Game Director's Chain of Command	Senior Players in the Game	Sponsors and Their Chains of Command
Successful senior people tend to be overconfident in their ability to handle novel situations that include chance. They often believe they already know the answers.		
No longer expert in research, development, or delivery of war games, owing to time spent leading and not doing.	Expert in topics being gamed but usually never was an expert in war-game design or analysis.	Responsible for obtaining answers to questions about topics being gamed, but usually never was an expert in war-game design or production. Might not even be expert in the topic.
An attempt to influence game design risks being an attempt to provide the sponsor with an answer the sponsor likes.	An attempt to influence game design risks being an attempt to advocate for a preconceived answer.	An attempt to influence game design risks being an attempt to advocate for a preconceived answer.
Objectives analysis with the sponsor aligns all three stakeholders onto the sponsor's objectives and preempts inappropriate attempts to influence the game design, thus protecting the stakeholders from charges of conflict of interest.		

senior people. Nevertheless, and however well prepared and informed they may be, it is critical that directors be expert and professional in all aspects of game delivery and, above all, have the moral courage to do what is right for the sponsor and the support of their own command when they do so.

NOTES

Dr. Downes-Martin presented an earlier version of this article to the Annual Connections Wargaming Conference, in July 2012, at the National Defense University, Washington, D.C.

1. Garry Wills, *Certain Trumpets: The Nature of Leadership* (New York: Simon & Schuster, 1994), chap. 10.
2. Note that most people mentally add to the phrases "most people tend to" and "it is extremely difficult for" the qualification ". . . everyone else, but not me." This tendency includes senior people in the game director's chain of command, the senior players, and the sponsor.
3. See, for example, Ellen J. Langer, "The Illusion of Control," *Journal of Personality and Social Psychology* 32, no. 2 (August 1975), pp. 311–28; Dominic D. P. Johnson, Richard W. Wrangham, and Stephen Peter Rosen, "Is Military Incompetence Adaptive? An Empirical Test with Risk-Taking Behaviour in Modern Warfare," *Evolution and Human Behavior* 23 (2002), pp. 245–64; Eliot Cohen and John Gooch, *Military Misfortunes: The Anatomy of Failure in War* (New York: Free Press, 1990); and Malcolm Gladwell, "Cocksure: Banks, Battles, and the Psychology of Overconfidence," *New Yorker,* 27 July 2009.
4. David Goodstein, *On Fact and Fraud: Cautionary Tales from the Front Lines of Science* (Princeton, N.J.: Princeton Univ. Press, 2010). Goodstein is vice provost of the California Institute of Technology. See also Michael Shermer, "When Scientists Sin," *Scientific American* 303, no. 1 (July 2010), p. 34, available at www.scientificamerican.com/.
5. How many times have you heard a staff arguing about what the boss meant instead of just going back in and asking?
6. These are in fact standard project-management questions, with close parallels to military planning. Failure to ask these is a mark of incompetent project management.