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***Panel:
Wargaming in support of Defense Decision Making***

***Speakers Notes:
“Your boss, players and sponsor: the three witches of wargaming”***

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The Macbeth of Wargaming

There are three classes of senior stakeholders, critical to the success of a national security wargame, but with the power to interfere negatively with the quality of the game. These are the wargame director's boss and chain of command, the senior players within each game cell, and the sponsor of the game and his chain of command. Each of these three stakeholders frequently attempt to influence the design of the wargame, even during game play itself. There are two reasons that such attempts to influence amount to inappropriate interference. First these stakeholders are not (usually) expert in wargame research, design, development or production, and second it is a conflict of interest for them to influence the game design. Such interference puts the credibility of the game's results into justifiable doubt. The wargame director,



“Macbeth and Banquo meeting the witches on the heath”,
Théodore Chassériau, 1855

responsible for delivering a quality game that addresses the sponsor's national security related objectives, must manage these three stakeholders throughout the wargame design, play, analysis and reporting to ensure the game meets the sponsor's objectives.

Research into intellectual leadership¹ indicates that it is extremely difficult for an individual contributor to return to being an intellectual leader after they have been in a position of administrative leadership for any length of time. This does not mean “hard to get their old job back”, or “it takes time to get back into practice”, it means “after they have got their old job back as an individual contributor and even after they have been back in that position for some time they tend to perform not as well as before they took a leadership position”. This is why in the military they call very senior leaders “Generals”, i.e. “Generalists”, i.e. “not expert specialists anymore”. They have become resource providers, managers, leaders, but are no longer expert at producing, no matter how expert they once were in the past.²

Research also indicates that senior people tend to be over-confident in their ability to control events that are in fact outside their own control³ while failing to realize the need for adapting their thinking. Their successful control of past situations leads them into the mistake of believing their competency applies to current situations, especially situations involving a high degree of chance.

¹ See Chapter 10 of “Certain Trumpets: The Nature of Leadership” by Garry Wills, 1994.

² Note that most people tend to interpret “most people tend to” or “it is extremely difficult for” as “everyone else, but not me”. This includes senior people in the game director's chain of command, the senior players and the sponsor.

³ See for example Malcolm Gladwell, “Cocksure: Banks, battles, and the psychology of overconfidence”, The New Yorker July 27, 2009.

Even if the three stakeholders were once wargamers or wargame experts, time spent leading and managing organizations (which is what senior people tend to do), instead of actually delivering wargames, results in decayed specialist knowledge and aging out of their expertise. They have been wargame consumers rather than producers of wargames for some time.

There is also the problem of conflict of interest. Three risk factors have been identified as present in nearly all cases of scientific fraud, these being 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 wargame that addresses important national security issues, and thus the stakeholders must be protected from charges of manipulating the game’s results by not permitting inappropriate interference with the game’s design.

The wargame director must learn how to pre-empt problems with these three stakeholders before they arise, and know what to do if the pre-emption is unsuccessful. The wargame director must have three characteristics for success. Two are required for any profession, being a high degree of professional expertise in the topic (in this case wargame design) and the moral courage, integrity and charisma to face down inappropriate interference from senior people. The former will provide guidance on whether the interference is inappropriate or justified. The third characteristic is a specific skill, being “objectives analysis”, applied to the specifics of wargaming. Core to objectives analysis are four questions put to the sponsor; “what do you want?”, “why do you want it?”, “why don’t you have it?”, and “when are you rotating out of here?” Good objectives analysis with the sponsor is a necessary precursor to pre-empting problems with all three of the stakeholders.

If the wargame director fails to show the courage and professional integrity required to manage these three stakeholders, and instead follows their advice for the wrong reasons, then despite the initial appearance of all going well, like Macbeth the game director will eventually end up in a very bad place. Acquiescing to stakeholders’ inappropriate demands or advice may temporarily fool the naïve, satisfy the delusional or fit the plans of a puppet master, but at the cost of damaging national security (assuming the game was worth doing in the first place.) If the sponsor discovers later that the game results are suspect, he will rightfully blame the game director (even if it was the sponsor’s interference that created the problem). The gamble being played by a morally weak or incompetent game director is whether the sponsor discovers the game’s results are suspect before rotating out of his current position.

⁴ “*On Fact and Fraud: Cautionary Tales from the Front Lines of Science*”, David Goodstein (vice Provost Caltech), Princeton University Press, 2010. See review online at <http://www.scientificamerican.com/article.cfm?id=when-scientists-sin> (last visited 7/27/2011).

Beware the Chain of Command

The wargame director will tend to be second guessed by his boss and other seniors in his chain of command who, with the best of intentions, are there to help him do his job at which he, but not they, are expert. Furthermore, they will collaborate with the sponsor to second guess the director, including demanding significant changes to game design and execution even during the game itself. They do not understand the nuances and impacts of the changes, and during game execution there is not enough time to identify possible unintended consequences or to educate them about the possible deleterious effects of these changes.

The game director's only recourse if this happens during the game is to explain succinctly the likely deleterious effects on game validity, the likelihood of unknown unintended consequences caused by breaking the design in the middle of the game, and the requirement to document the source of the changes and their effects in the game report, and to proceed with the changes if directly ordered to do so by his own chain of command. The game director can reduce the likelihood of this problem occurring by good objectives analysis with the sponsor and by keeping the boss informed of the results of this analysis. This requires the game director has done a good job to start with, is expert in all the nuances of the game and its design, and has the courage to do the right thing for the sponsor.

The conflict of interest problems that promote intellectual fraud are present for the wargame director and his chain of command. One removes these risks for the wargame director by ensuring he has no *current* career interest in the outcome of the game; the director's organization is mission funded⁵; has his own chain of command's confidence in his expertise; and the wargame director is *authorized* and supported by his chain of command to face down inappropriate interference from his own chain of command, the senior players, and the sponsor. The wargame director must be willing to execute his authority, and expert enough to distinguish inappropriate interference from justified direction.



Adapted from the 1954 movie "The Caine Mutiny"

⁵ I.e. the funding is outside the sponsor organization's control.

Beware the Senior Players

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

Senior players will be tempted to redesign the game from the moment they turn up through to the end of the game, but it is extremely unlikely they will have the analytic skills to identify the unintended consequences or downsides of a last minute or in-play redesign of a game. The idea might have been a good one back when the game was being designed (or it might not). I have watched a retired three star cell lead redesign a game during play and seriously damage the quality of results for the active duty four star who was the sponsor because the game director did not have the combination of skill and moral courage to call the retired three star on the issue. Claiming this is a matter of seniority is disingenuous. National security deserves better.

One way to pre-empt this problem is to recruit, not invite, senior cell leads early during game design and after objectives analysis. The game director meets with candidate senior players and explains the sponsor's objectives and game design, and explicitly recruits them to *lead the cell in playing the game as designed*. It is at this stage that the game director incorporates any good ideas the candidate senior player has into the design. The game director must be prepared to reject them and recruit another senior player if, in the director's judgment, the candidate is unwilling to commit to the objectives and design and to playing the game *as designed*. If for some reason a candidate senior player is simultaneously uniquely necessary to the game, very senior, and challenges the design to the point that the sponsor's objectives are endangered, then the director must put the candidate senior player in touch with the sponsor for resolution.

If the accepted senior player still attempts a redesign during the game, then the game director must point out that although his changes have obvious merit they interfere with the sponsor's objectives and request the senior player return to playing as designed. If the senior player refuses then the game director should bring the game to a halt and engage his own command and the sponsor while informing all of the likely deleterious effects of the changes and the requirement to document said changes along with the effect they are likely to have on the



"Fall of the Titans", Cornelis van Haarlem 1588

sponsor's objectives. Finally, the game director will implement the changes if directly ordered by his own chain of command.

Beware the Sponsor

Ideally a game sponsor brings to the table a clearly articulated problem, of importance to national security, whose elucidation at least involves wargaming.

All too often a sponsor either brings the problem of implementing a poorly thought out solution to a problem that has not been articulated (and indeed the sponsor may even be unaware of the underlying problem) or brings the desire to advocate some pre-conceived answer. Attempts by the sponsor to influence game design in the latter case are clearly a conflict of interest.

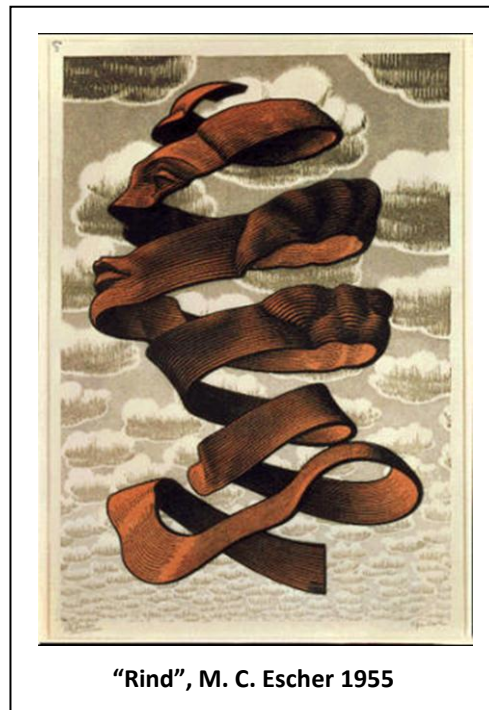
The sponsor may have delegated the game and its decisions to an action officer while retaining the right to countermand the action officer's decisions late in the game time-line, and further, the sponsor may be about to rotate out of his organization. **There are two kinds of absentee sponsor:**

1. First, military sponsors have a limited shelf life; they rotate out of the sponsoring organization. The wargame must be designed, executed, analyzed, written-up and the results socialized by the sponsor before he rotates out for the game to have any effect. Although most senior officers rotate on a one or two year frequency, the sponsor may be rotating out only a few months in the future.

If the sponsor is fully engaged, then the time available for game design, execution, analysis and reporting is the sponsor's rotation date minus the time needed to use the results to influence the sponsor's audiences.

2. Second, senior sponsors are often so busy they delegate decisions to their action officer, but retain the right of changing, at the last minute, decisions or objectives made by the action officer. They are disengaged from the project, and their action officer becomes the sponsor. Unless of sufficient seniority, the action officer might not have the authority to make serious or speedy decisions, and in addition might not fully understand the intent of his boss.⁶ In this situation the game director faces the likely risk of the sponsor countermanding the action officer's decisions late in the project time-line, thus generating inefficiencies and damaging game quality.

If the sponsor keeps pushing the initial discussions about the game and its objectives onto his action officer, then it is the action officer's rotation date that signals the end of the sponsoring organization's interest in the game's results, and the sponsor has signaled the relative



"Rind", M. C. Escher 1955

⁶ How many times have you heard a staff arguing about what the boss meant instead of just going back in and asking?

unimportance of the game in his list of priorities. The game director's boss must then decide how important the game is to his own organization, and whether his objectives for the game are the same as the sponsor's objectives.

The Initial Meeting with the Sponsor

The game director must push for the first meeting to be between him and the sponsor in person, not just the action officer (no matter how many staff participate in that first meeting, nor how many PowerPoint slides the staff use to brief the sponsor's objectives) with or without the game director's boss present. The sponsor's willingness (or not) to have a 60 minute detailed interview with the game director about the objectives, or the rank of the action officer if the sponsor is not available in person, will say much about how serious the sponsor and his organization is about the game, and this will influence what level of seriousness and resources the game deserves.

I have had the experience of first being briefed by a sponsor's staff (who did not believe it was necessary for the game director to meet with the game sponsor) where they explained to me the sponsor's highest priority objective. I then refused to proceed until I met the sponsor to confirm this. At the resultant

sponsor meeting the staff and I listened to the sponsor flatly contradict his staff on what his number one objective was, and instead he explained to me what his priorities really were. They were sufficiently different that a game aimed at what his staff claimed was the priority objective would have been completely unsatisfactory to the sponsor.



From the 1935 movie "Bride of Frankenstein"

Objectives analysis

The game director's first task is to identify the real objectives and their importance to the sponsor. Remember, the sponsor may actually be unaware of what these are. The approach is to ask four questions:⁷

1. **“What do you want?”**

This question is usually answered by the sponsor's first communication with the game director's organization. The sponsor states what he wants and the game director does not argue with this.

2. **“Why do you want it?”**

The game director explains to the sponsor that any objective is broad enough to cover a myriad subtopics, only some of which are a priority to the sponsor, and it is necessary to drill down on these, by interviewing the sponsor, to ensure the game is focused on his priority needs. This is equivalent to asking for the commander's intent. For each answer the sponsor provides, the game director drills down again asking “and why is this important to you?” This is an art, interviewing and drilling until the game director has identified the priority needs of the sponsor.



It is critically important to find out who are the sponsor's audiences and external stakeholders for the game's results, and when he needs the results in order to influence his audiences.

3. **“Why don't you have it?”**

The game director drills down to identify root causes of why this problem has not already been solved. This will provide invaluable information about hidden agenda items, political and institutional pressures and imperatives, previous attempts and why they failed, etc.

4. **“When are you rotating out of here?”**

The game director also asks the follow-up question “When is your action officer for this game rotating out?”

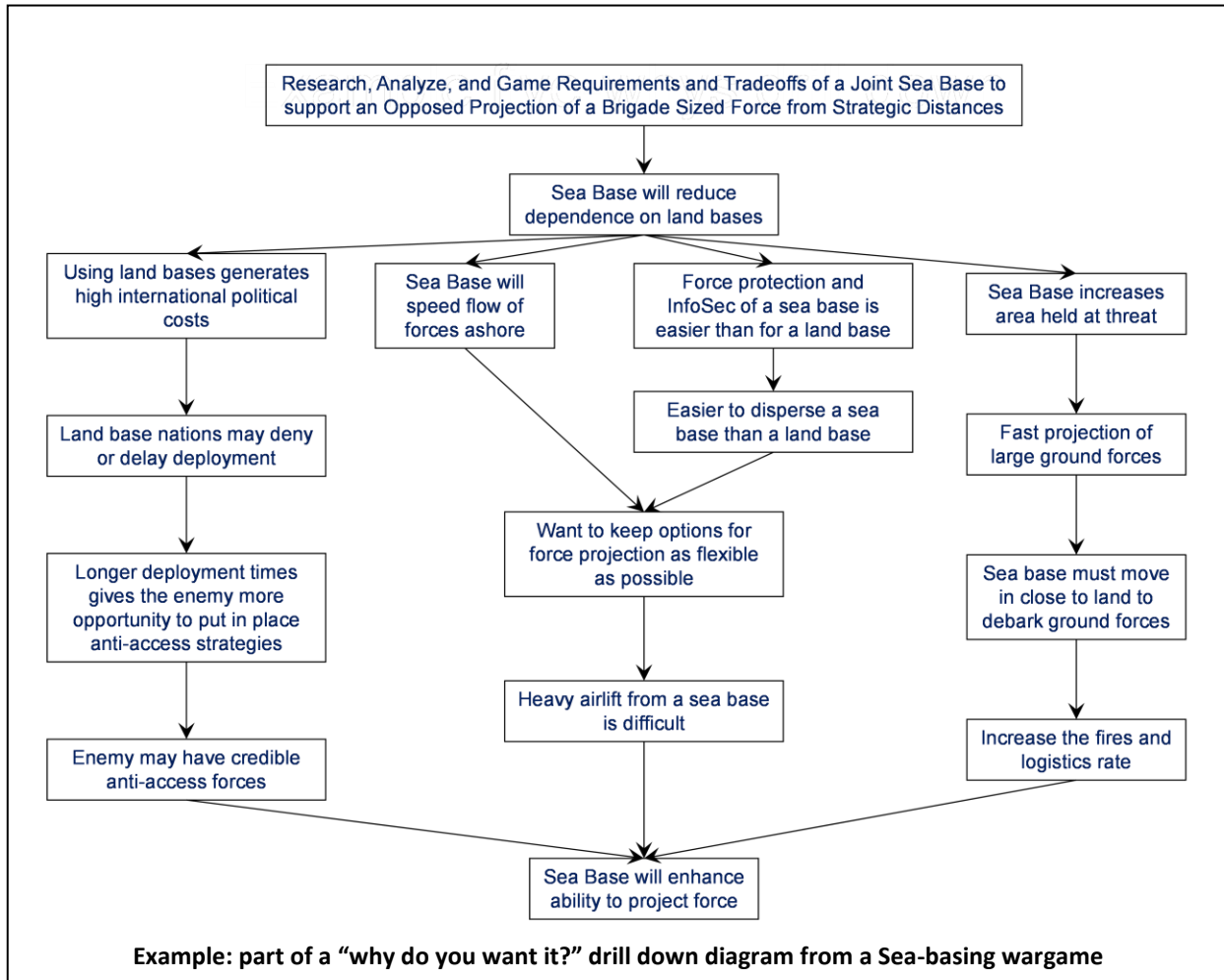
The game director must ask the four questions in the order given and in the presence of the sponsor's action officer. The very act of answering the first three makes the sponsor think through his objectives, the reasons for them and the barriers to achieving them. This has three major effects. First, the sponsor and the game director now understand the problem better, second both have a better understanding of how important, or not, the game is to the sponsor and

⁷ These are in fact standard project management questions with close parallels to military planning. Failure to ask these is incompetent project management.

his organization, and third the sponsor’s action officer and staff now understand the sponsor’s 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 with the sponsor the game director asks a series of questions such as “why do you want it?”, “why is that important to you, or to your stakeholders, or to ... (whoever else has surfaced)?”, “what is it that is important about that?” etc. The game director asks one of these “importance” questions (or one similar) for each answer given, and the sponsor usually will provide more than one answer to each question. This initial interview with the sponsor should last about 60 minutes. The game director then writes up the interview in a one to three page information paper for the sponsor to review and sign or to correct. Depending on how many corrections there may need to be a follow-up interview.

When the sponsor and the game director have an agreed document, it is useful to diagram it for game design purposes (see the example below taken from a Sea-basing wargame). The diagram also 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 node in the diagram is an answer to the “so what?” question about the linked claim pointing to it. For example in answer to the question “why is *force protection and infosec of a sea base is easier than for a land base* important?” the sponsor of this game said



“because it is easier to disperse a sea base than a land base”, and in answer to why that was important he said “because I want to keep options for force projection as flexible as possible”, and so on. Note that the drill down is likely to be a lattice rather than a tree, and knowing when one is done is an art. After about an hour of interview, the sponsor will have provided enough information to write up (for the sponsor) and diagram (for the game director) the commander’s intent for the game. The game director will write up both the information paper and the diagram in English sentences using complete English sentences of nouns, adjectives and verbs (not Pentagonese, bullets, or cartoons). For the game’s designer, the nouns provide guidance on what actors the game must represent (either by live players or simulation), the verbs provide guidance on what actions the actors carry out in the game, and the adjectives provide guidance on the characteristics of actors and the actions taken by them.

Conclusion

After a proper objectives analysis with the sponsor, the game director is now in a position to either design a game, or advise the sponsor that he needs something other than a game, or that several different approaches must be used to illuminate his problem, and is also now in a position to think about game resources (time, people, technology) required and to start game design.

The game director also has the required information to keep his own chain of command informed, keep the sponsor’s action officer and staff from driving design, recruit senior players to lead the game cells, and to decrease the likelihood of inappropriate interference from well meaning senior people occurring.

However, it is critical the game director is expert and professional in all aspects of game delivery, and has the moral courage to do what is right for the sponsor.

Game director’s chain of command	Senior player in the wargame	Sponsor and his chain of command
Successful senior people tend to be over-confident in their ability to handle novel situations that include chance. They often believe they already know the answer.		
No longer expert in research, development or delivery of wargames due to time spent leading and not doing.	Expert in topics being gamed, but usually never was an expert in wargame design or analysis.	Responsible for obtaining answers to questions about topics being gamed, but usually never was an expert in wargame 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 pre-conceived answer.	An attempt to influence game design risks being an attempt to advocate for a pre-conceived answer.
Objectives analysis with the sponsor aligns all three stakeholders onto the sponsor’s objectives and pre-empts inappropriate attempts to influence the game design, thus protecting the stakeholders from charges of conflict of interest.		