Evolving to Effects Based Operations

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Abstract

Much has been written over the last few years about Effect Based Operations. Most agree that it is not a new form of warfighting and that the concepts have been applied successfully (although not consistently) since the beginning of warfare. *Why then is EBO receiving such high level attention now? Why is it creating so much confusion and misunderstanding? What is so hard about formalizing concepts that meet almost universal approval?* This paper explores the answers to these questions. The historical roots of EBO explored and related to the existing doctrine of the time. Current military doctrine is reviewed in terms of suitability to encourage if not direct the use of EBO principles in modern warfare. Recommendations are made for future revisions to doctrine in order to further evolve EBO principles and objectives.

Why is EBO receiving such high level attention now? Although effects based thinking is evident in many historical examples of military operations, the extent of EBO has always been limited by existing capabilities. Up until the middle of the nineteenth century, attrition was the predominant effect achievable with the existing military capabilities. Maneuver warfare opened new possibilities and the advent of Air Power opened even more. But in the last 20 years or so, rapid advancements in information technology, precision weapons delivery, stealth, geo-location, sensors, Info Ops, Space Ops, and connectivity have flooded the military planners with new capabilities to achieve effects not even considered possible 20 years ago. This rapid expansion of the military planning and assessment universe has captured the imaginations of military and public alike, yet is almost overwhelming the practitioners of military operations. Recent

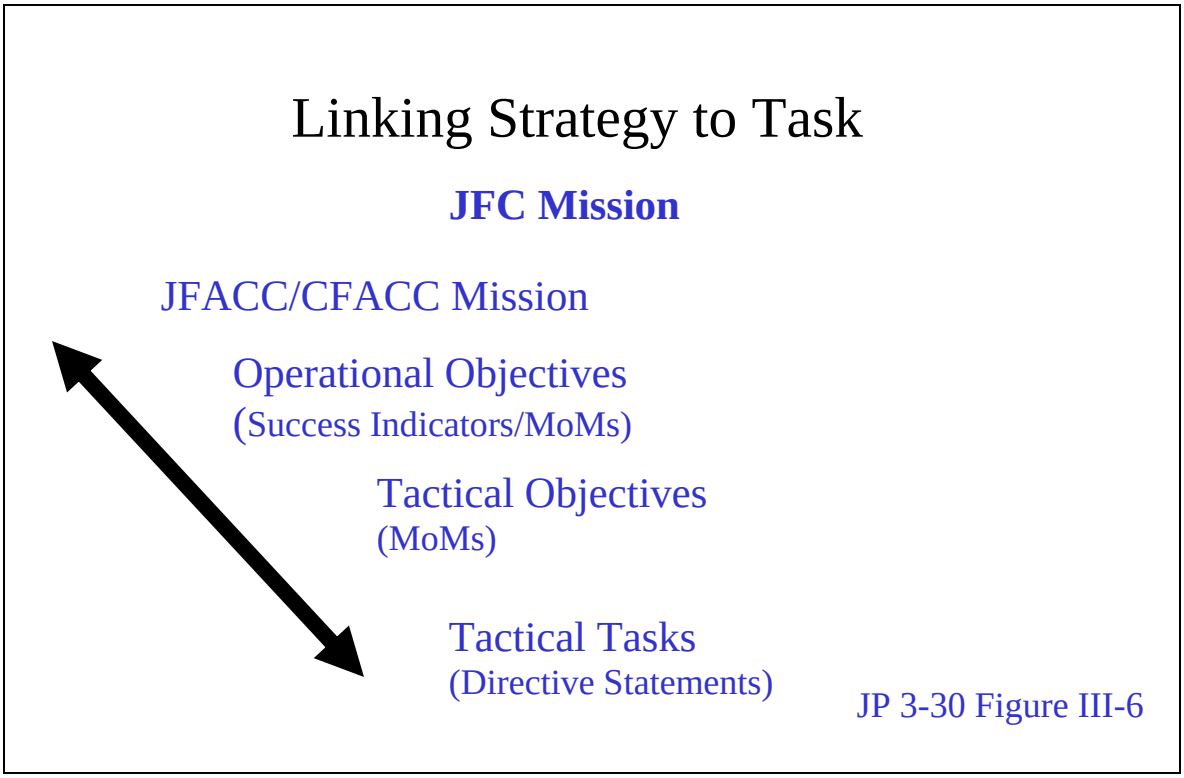
examples of dramatic effects being achieved through unconventional means serve to highlight the potential of EBO if applied with more rigor and consistency. Thus the quest for more EBO.

Why is it creating so much confusion and misunderstanding? If the concepts have been long understood, even if limited until recently by capability, why is there still widespread misunderstanding about EBO? The answer is fairly straight forward. Although not new in concept, new EBO terms and vocabulary have emerged along with processes and methodologies that are not familiar or always consistent with published doctrine. Further compounding the misunderstanding is the coupling of EBO to other new concepts such as Decision Superiority, Predictive Battlespace Awareness and Network Centric Warfare. There is certainly a great deal of synergy and enabling to be had from all of these concepts, but the basics of EBO can stand alone without them, and to achieve the clearest understanding probably should. Finally, EBO is sometimes being credited with achieving other operational concepts or effects, such as parallel warfare, combined operations, ISR persistence, or non-lethal methods. Under the right circumstances all of these can also help enable the successful execution of EBO, but are at the same time not integral to it. Sticking to the basics of EBO would go a long way toward understanding the concepts and how they should be applied .

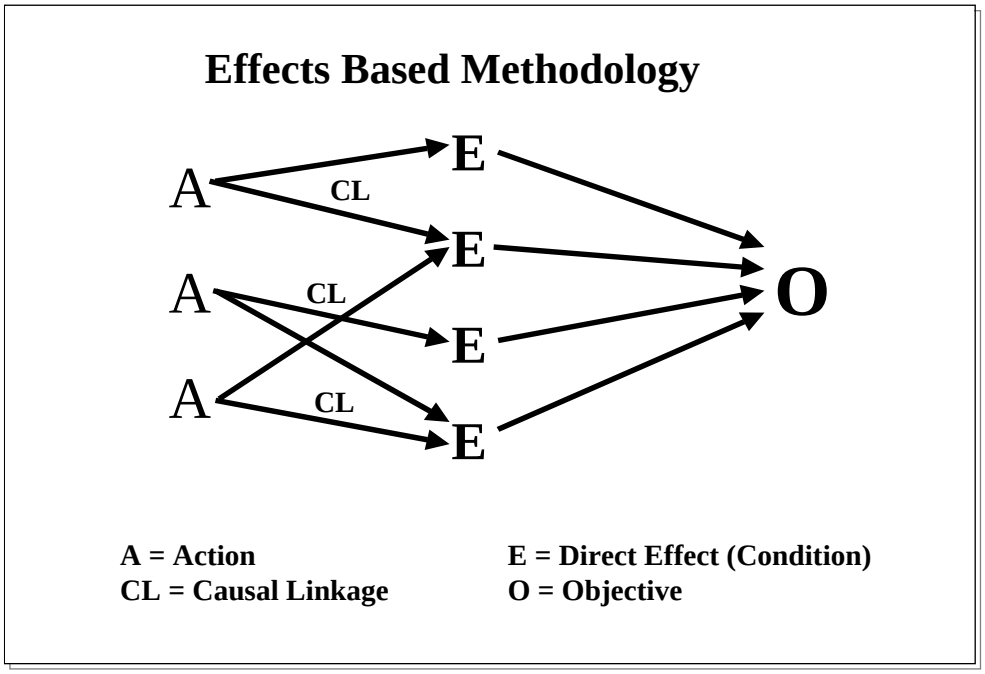
What is so hard about formalizing concepts that meet almost universal approval? Perhaps we are making it too hard –perhaps the basics are already there in existing doctrine and methodology. Indeed, the USAF Air Combat Command's (ACC) EBO White Paper states that EBO is simply a refinement of the familiar *objectives based (*Strategy to Task*)* planning process. If this is so, just how much refinement is required? And why have so many new terms emerged? A quick comparison of the EBO Process vs what is published in JP 3-30 (Draft) reveals that all the basics of EBO are there now – however, 3-30 does not directly call for

"effects" to the be the focus of the planning process. This would suggest that the primary refinement to the *objective-based* process would be emphasis on effects while keeping current terminology and process changes to a minimum. Could it be this easy?

At a very top level, the following two charts illustrate the perceived differences (and arising confusion) between doctrine and EBO. The first chart (from Draft JP3- 30 shows the process for Strategy-to-Task *(objective based planning).*



The second chart (from the ACC EBO White Paper) illustrates the EBO Methodology.

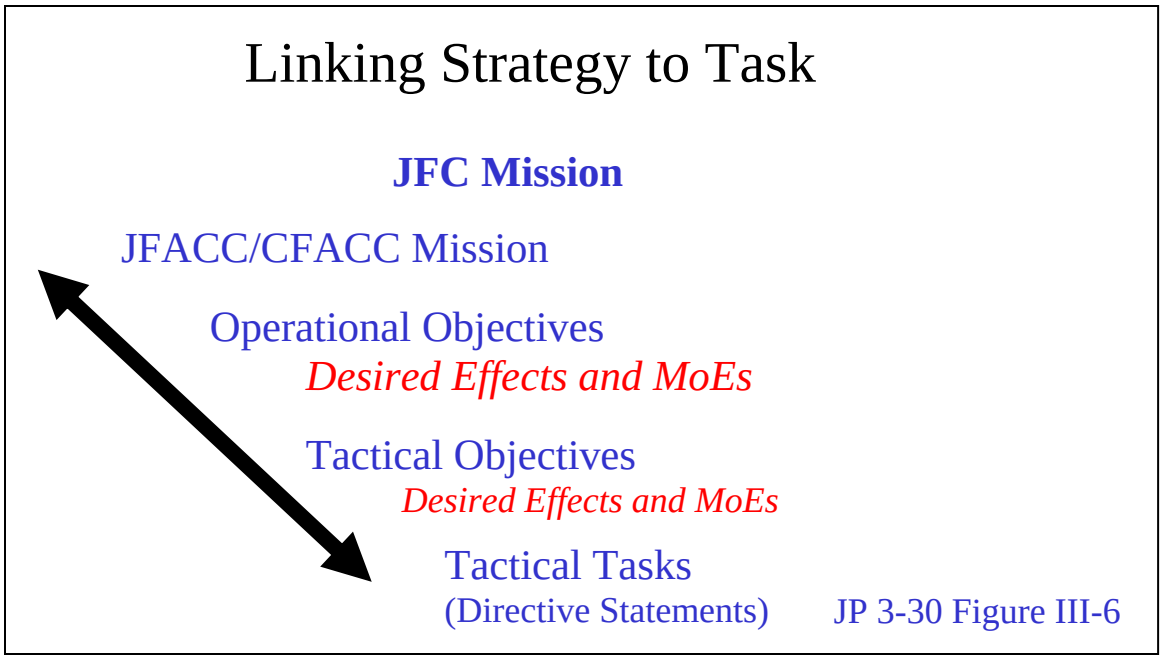


ACC EBO White Paper

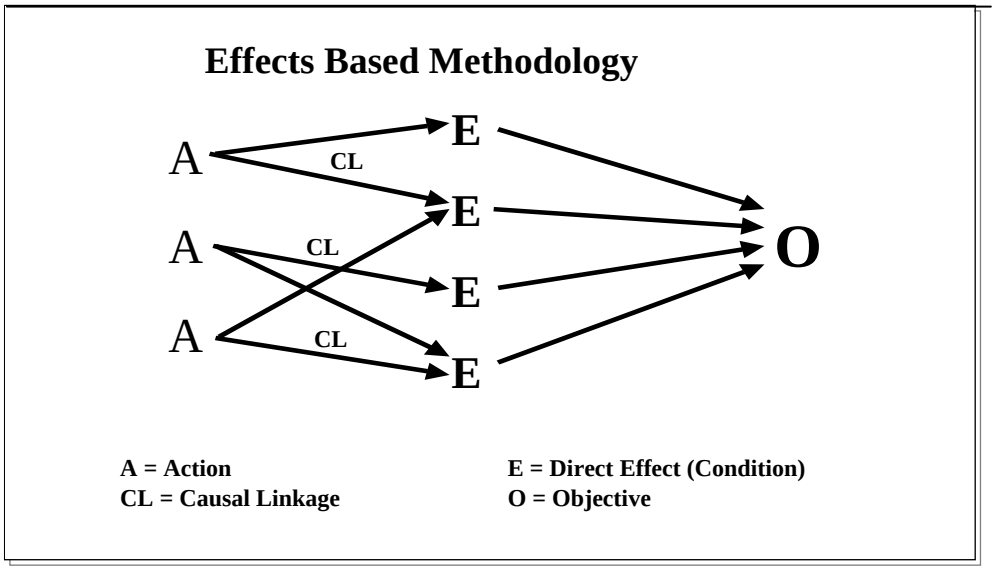
Variations of the Strategy-to-Task chart have been around for a long time (although why it isn't called Objective -to-Task has always been a mystery). Warfighters seem to understand Objectives and Tasks (even though they still sometimes confuse them) and Operational and Tactical. Measures of Merit, on the other hand, have always been a bit problematic, if not sometimes ignored altogether. This is because the planners of yesterday (and perhaps a few today) were always primed to go from Objective straight to Tasks. For the objective of Air Superiority, as an example, the well seasoned planner knew what had to be done: destroy the Air Defense System, Disable the Airfields, etc. Only then, usually after some prodding from Intelligence, would he go back and fill in a MoM –and since the Tasks (and target sets) were already defined, the MoM usually related to some physical count on the targets sets (70% Sam Sites Destroyed). The resulting "out-of-sequence" process doomed any chance of effects based

thinking, much less execution, even though all the basics of EBO existed in the Strategy-to-Task process.

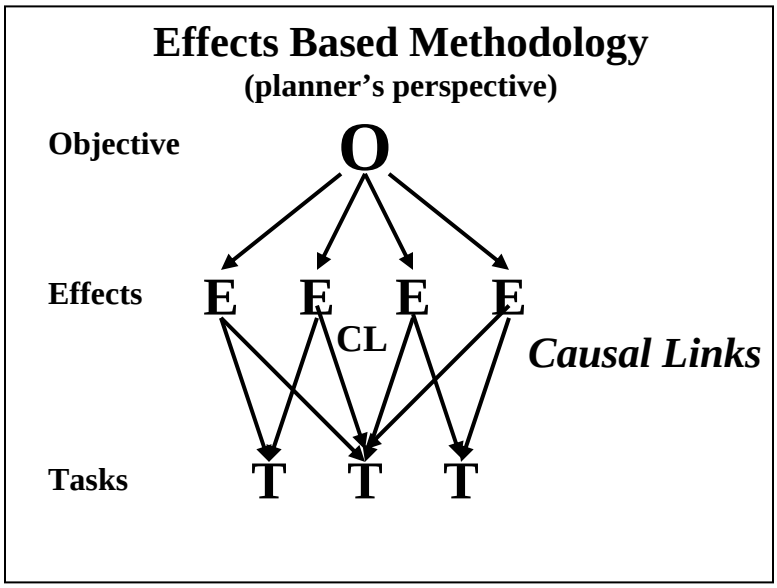
Measure of Effectiveness (MoE) is often used interchangeably with MoM, and in the EBO context it should be the term of choice. By establishing one or more MoEs for each objective, you have in essence defined the desired effects. In the simple Air Superiority example, an appropriate MoE might be "no active tracking radars" –this is also the desired effect. Only now that the effect is defined does it make sense to determine the required tasks, emphasizing consideration of all options, lethal and non-lethal, for achieving the effect. So with the following changes to the JP 3-30 chart, along with text that emphasizes proper sequence and focus on effects, we could incorporate the basics of EBO.



When the warfighter is presented with the EBO chart from the ACC White Paper, he has difficulty relating this to the familiar Strategy-to-Task process. For starters, it flows left-to-right rather than top to bottom, which doesn't present much of a problem as long as "left" corresponds to "top" and "right" to "bottom". Unfortunately, this is not the case.



The theorists have quite appropriately constructed the chart to illustrate cause and effect –i.e., actions, through casual links, lead to effects which lead to meeting objectives. However, from the military planner's point of view, the flow is just the opposite, ala the Strategy to Task chart. Objectives are determined, followed by desired effects, followed by tasks (actions). If the term "action" was replaced by "task"(even though "action" is a more accurate description from the scientific view), and the chart re-oriented to the planners perspective, it would look similar to the Strategy to Task depiction.



Causal Linkage is now the only "new" term introduced– but this is simply the rationale or the "why" a specific task is expected to lead to a desired effect. Establishing casual links is a key part of the mental process of determining appropriate tasks – however, many are derived almost intuitively. Unfortunately, undue attention to this term has caused confusion when in reality it should flow naturally in the process.

There is one important difference highlighted when comparing the EBO Methodology chart with the Strategy -to -Task view. In the Strategy-to-Task process, stovepipes are created from objectives to tasks in a way that ignores the fact that specific tasks can support more than one objective. The EBO chart captures the important interaction between tasks and effects, indicating to the planner that he should look for the multiple, compounding effects from each task. Indeed, one could even raise this interaction to the Objective level – i.e., desired effects can support more than one Objective. Then, of course, there are the unintended effects to at least ponder. From the not-so-famous organizational theorist and entrepreneur Dee Hock:

> *"Everything has both intended and unintended consequences. The intended may or may not happen; the unintended consequences always do."*

The purpose of this paper is not to over-simplify the EBO process. Although the concept is not new, it is a great challenge in today's environment to apply it systematically with good results. But success depends more on mind-set and focus than prescribed process. With the right mind-set, even doctrine as it is written today can accommodate the essentials of EBO. With some refinement, re-orientation, emphasis, and training, it can vastly improve the warfighter's chances of grasping the essentials and applying EBO more consistently. EBO has been a topic of funded research for several years now and has made significant gains in understanding cause-effect-outcome from a scientific perspective. But EBO is as much an art as it is a science, and it's

hard to prescribe art. It is now time to strip the research wrappings from EBO and translate it into terms that are relevant and easily understood in the heat of battle. Again, from Dee Hock:

> "*Simple, clear purpose and principles give rise to complex, intelligent behavior. Complex rules and regulations give rise to simple, stupid behavior.*"