

Introduction

Viewed in conjunction with US Space Command's Long Range Plan (March 1998), publication of James E. Oberg's *Space Power Theory* registers a long-awaited and long-needed milestone in the journey towards understanding the (military) space environment.

Excellent technical manuals are readily at hand (for example, James R. Wertz and Wiley J. Larson, eds., *Space Mission Analysis and Design*, 1991), but well-argued texts on space power have been notable for their rarity. Colonel David E. Lupton's study *On Space Warfare* (1988) is a lonely tract indeed. Why has there been a problem developing a body of space power theory?

To be blunt, hardly anybody really has been very interested in "space power," let alone a general theory for space power, or indeed in the space environment as an environment for conflict. Instead, space has attracted attention

- As a realm wherein national scientific and engineering prowess could be showcased
- As a sentimentalized zone that should not be polluted by terrestrial nastiness
- As a geographical medium whose exploitation is potentially vital for the effectiveness of multi-layered ballistic missile defenses

The result is that we reach the end of the century with a large arms control literature bearing upon space—notwithstanding the immaturity of space technologies—with an even larger technical and scientific literature on technologies of interest, and certainly with a substantial "space policy" literature that tells us next to nothing worth reading about the space environment, but vastly more than we need to know about the political prejudices of the authors.

It is very hard to get it right. For nearly twenty years, I have notice that space writings have tended overwhelmingly to be (1) either too technical or too political, as well as, (2) either too lacking in vision or overly fixated upon "the stars." To my mind, "space" can, and should, be approached in several complementary ways. To suggest

the need now for some “space power theory” is neither to be blind to the glories of the Cosmos, nor is it to ignore the practical technical, political, and financial issues of today. Over the years, it has been my experience that to advocate work on “space power theory” is to invite political assault. The assault has come from both those who are morally offended by my view that space can be approached as “just another environment for war,” and by those who have difficulty elevating their perspective, from tactics through operations, to strategy.

Of course, space is not “just another” geographical environment. An “environment” comprising everywhere beyond the zone of significant drag from the Earth’s atmosphere, can hardly be compared with our strictly terrestrial land, sea, or air environments. Nonetheless, “tomorrow the stars” and all that notwithstanding, the embarrassing fact remains that between the large literature extant on “space and the SDI,” or “space exploitation,” there is next to nothing on the apparently mundane, but to my mind vital, subject area of space as an environment for war.

For many years, I have believed that strategic understanding in general, and US national security in particular, were perilously bereft of comprehension of the space environment. At least three levels of analysis command attention. First, it is important to recognize that “space power,” however defined, does not operate “beyond strategy.” The actual “doing” of any military activity is the realm of tactics and operations, while the effect, the consequences, of that tactical “doing” is the realm of strategy. (Carl von Clausewitz had the matter exactly right: strategy is “the use of engagement for the object of the war.”) To understand land power, sea power and air power strategically, is similarly to understand space power! Second, space power can be “done” only in ways compatible with the physically unique conditions of the space environment. So while space power generates “strategic effect,” just as land power, sea power, and air power also generate that effect, space power has characteristics that are inherently geographically distinctive. Third, analysis of space power is ever liable to ambush by those among us who, sometimes reasonably, are focussed upon what can be done either today or very soon thereafter.

The Heavens are not to be compared spatially with our trivial terrestrial dimensions, but to us strategists on Earth today, space is, in a vital sense, just another geographical environment. To date, our military space literature has yet to record a major publication which combines a sound exposition of astrodynamics (“orbitology”), with a good grasp of strategic principles, and a prudent sensitivity to the military and economic stakes of space activity.

Space Power Theory is a useful step towards populating the library we need. There is no “right way” to theorize about space power. People, such as myself, have recently lamented “Where is the Mahan for space power?” We have not meant to suggest that scholars should attempt a reprise of space ala Alfred Thayer Mahan’s masterwork on sea power (*The Influence of Sea Power upon History, 1660–1783* [1890]). We have meant that Mahan is a model to be emulated, in that he attempted to explain the terms and conditions for strategic success or failure in an entire geographic environment. That boldness in willingness to theorize, that breadth of geostrategic domain, is what is needed today.

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