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“A Survey of Attitude Representations,” M. D. Shuster, *The Journal of the Astronautical Sciences*, Vol. 41, No. 4, October–December 1993, pp. 439–517.

This article of 79 pages and 163 cited references attempted to gather in one place and in one consistent notation all of the known results of the attitude representations with only skeleton derivations. Great service to this article was performed by Professor George Rossborough, then the managing editor of the JAS, who was much better at finding typographical errors than the author.

This is by far my most cited publication. It was reviewed for the JAS by John L. Junkins and an anonymous reviewer. Professor Junkins noted correctly that this was not a work of original research (actually, there was a minute amount) but that it would be of great service to the Astronautics community. The other reviewer stated only that the work was “superficial and done better elsewhere.” My sole response to the second reviewer was “where?” To bait this reviewer, I added a sentence in the Introduction that “Despite its breadth, this article may be justly accused of superficiality.”

The impetus for this work came from the chapter “Spacecraft Attitude Determination and Control,” that I was writing for the book *Fundamentals of Space Systems*, edited by V. L. Pisacane and R. C. Moore (see 1994c). The treatment of the attitude representations in that chapter was the same as I had planned for a book on Spacecraft Attitude Determination (a draft of these chapters already existed), and the contract with Oxford University Press for the Space Systems book seemed so confining that I feared not being able to use this material. To preempt this problem, I decided to publish a journal article on the attitude representations that would make my approach preexisting. The original submission was only about 49 journal pages long, but it eventually grew to 87, and then shrunk to its present 79. When I submitted this article to the JAS, I told friends that this was the least original article I had ever written, but I believed it would become my most cited. I was right.

Following acceptance, John Junkins asked me to extend the length of the survey by another sixty pages, so that it alone could fill an entire special issue of the JAS, for which he proposed himself as guest editor. I replied that this was a great idea and then suggested to the editor-in-chief of the JAS that he authorize a special issue on the attitude representations, of which this would be the lead article. The editor-in-chief consented, whereupon I gave this news to John Junkins with the remark “I have my half of the special issue already, now you find your half.” This turned out to be a good place for two other of my articles (one with Junkins), which had already been sent separately to the JAS for general review and accepted. Additional contributions came from Itzhack Bar-Itzhack, F. Landis Markley, Harold S. Morton, Jr., (his very last publication), Roger Broucke, Andr Deprit, and Antnio Elipse. Bar-Itzhack, Morton, Broucke, and Deprit have since passed away.