

The Measure of Reality  
Quantification and Western Society 1250-1600  
by  
Alfred W. Crosby  
Cambridge University Press, 1997

reviewed by  
Ken Krechmer  
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Prof. Crosby attempts to explain the emerging dominance of the European countries over the rest of the world's inhabitants in the 13th to 17th centuries by the rise of quantification, the shift from qualitative to quantitative thinking. Interestingly, this book was published in the same year as "Guns, Germs and Steel" by Jared Diamond which attempts to explain a similar rise by biological processes and organized violence.

The 240 page book is divided into three sections: Pantometry (universal measurement) of space and time, Visualization (in music, painting and bookkeeping), and Epilogue (his conclusions). Prof. Crosby researches a broad cross section of the arts and sciences over the period to build his thesis. He even mentions standardization on occasion, but does not identify that standardization is as fundamental to quantification as the reverse.

Beginning with Peter Bruegel the Elder's 1560 drawing "Temperance" as an indication of the world view of the period, the author describes how this drawing identifies the emerging importance of quantification through its presentation of pantometry.

His section on visualization recognizes how perspective drawing emerged and developed into engineering drawing concepts (cross section, cutaway, projection of maps). He does not mention the relationship between perspective drawing and similarity standards or the Venice arsenal (perhaps the first industrial assembly line and the first recorded use of an industrial patent), where similarity standardization may have emerged.

In the epilogue, he lays out his thesis that the Europeans' change in world view enabled them to conquer the world: "...reduce what you are trying to think about to the minimum required by its definition; visualize it on paper, or at least in your mind, be it the fluctuation of wool prices at the Champagne fairs or the course of Mars through the heavens, and divide it either in fact or in imagination, into equal quanta. Then you can measure it, that is, count the quanta."

The work is broadly researched and offers many footnotes to identify references. There is a serviceable index but the footnoted references are not collected into a bibliography.