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100 YEAR ANNIVERSARY BOOK**Keywords:** *agricultural drawing, required subject, holistic viewpoint.*

The book „Agricultural Drawing and the Design of Farm Structures” by French T.E. and Ives F.W. from Ohio State University was published in the year of 1915[1]. I was interested in this book not only because of the date of publication, but especially because of the style of material presentation. It can be used as an example for us today when we prepare methodical material for students.

In the Preface we can find clear argumentation why Engineering Drawing must be a required subject for all agricultural courses (Fig.1). Additionally to traditional text book content we can find formulas, tables and other information useful for drawing and designing.

PREFACE

As the title implies, this book is intended primarily for students in agriculture and agricultural engineering. **Engineering Drawing is a required subject in practically all college agricultural courses. It is not given in these courses with the idea of making professional draftsmen, but is regarded as an important subject for increasing the efficiency of the farm owner or manager, by giving him what is in reality a new language in which to express and record his ideas.**

Aside from mechanics and builders, there is no class to whom the value of technical drawing should appeal with as much force as to the progressive farmer. His literature is full of illustrations and technical sketches, which to be read intelligently require a knowledge of technical drawing. Government bulletins, State bulletins, agricultural periodicals and books, even trade and machinery catalogues, cannot be fully understood without this knowledge. In order to build properly, or to pass upon a set of plans, he should be able to read architectural drawings. The man with the ability to draw “to scale” can plan his buildings, “take off” his bill of materials, estimate the costs, and mentally see the finished structure before it is built. He can make sketches of broken parts of machinery, or of special pieces which he wishes to have made, he can make a layout of his buildings or a plat of his farm. In short, he has an asset of distinct advantage and value.

Fig. 1 Clear argumentation why Engineering Drawing must be a required subject for all agricultural courses [1]

By analyzing the contents of the book I asked myself – if maybe we could find if there is any prehistory of the contemporary Building Information Modeling (BIM) technologies, at that time level of course (Fig.2).



Fig. 2 Comparison of the book [1] contents with the BIM services scheme

To sum up the main book's advantage is the training of a holistic viewpoint which isn't less actual today, when we have students with well-trained copy/paste abilities, but without the ability to see the big picture.

References:

- [1] French T. E., Ives F. W.: 1915. Agricultural Drawing and the Design of Farm Structures. First edition. New York: McGraw-Hill Book Company, Inc. - 130 p. Available from: <https://archive.org/details/agriculturaldraw00frenrich>
- [2] BIM Services – An Overview. (2015, march 24). Retrieved from: <http://www.bluentcad.com/services/revit-bim-services.html>