PANEL

THE FUTURE OF PHOTOGRAMMETRIC EDUCATION*

MODERATOR

Prof. Sumner B. Irish, Princeton University, Princeton, N. J.

PARTICIPANTS

Prof. Kenneth B. Jackson	*Photogrammetry: Its Significance, Scope and Content*
Prof. Francis H. Moffitt	*Photogrammetry in the Civil Engineering Curriculum*
Mr. Merle P. Meyer	*Photogrammetric Training for the Technical Forester*
Prof. Frederick J. Doyle	*Higher Education in Photogrammetry*
Dr. Paul Rosenberg	*Informal discussion of papers by participants*†

PRELIMINARY STATEMENT

Arthur C. Lundahl, President, American Society of Photogrammetry

THE last feature on the program for today is this panel on the future of photogrammetric education.

The moderator is Professor Sumner Irish in the Civil Engineering Department of Princeton University. He has had a long and varied background in mapping and surveying and photogrammetry, from actual field operations in surveying and mapping to teaching photogrammetry at Princeton. Sumner has been a devoted follower of our meetings, an active supporter of the Society, and served last year in a tough job as Chairman of our Semi-Annual Meeting Committee.

The subject of this panel is most timely since we are concerned with questions of licensing and professional requirements in photogrammetry. We need to get down to the core of the definitions of the terms and just what should go into photogrammetric education.

INTRODUCTION

Professor Sumner B. Irish, Moderator

THE panel on the future of photogrammetric education represents a balanced group for bringing out the various ideas that are current and others that should be current.

Professor K. B. Jackson, University of Toronto, will show a little of the breadth of photogrammetry, where it can go and what it can lead to. He will be followed by three men representing three different disciplines, as far as photogrammetric education is concerned. Professor Moffitt will talk from the civil

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† It had been planned that this discussion would be given by Dr. Duncan Macdonald of Boston University. Illness prevented his attendance at the meeting. Dr. Rosenberg, Consulting Physicist, New York City was requested to act as a substitute. He spoke extemporaneously.

EDITORIAL NOTE. At the time the manuscript for this issue was sent to the printer, the corrected manuscript of Dr. Rosenberg's extemporaneous discussion and also of the general Panel discussion was not available.

engineering standpoint, Mr. Merle Meyer from that of the school of forestry, and Professor Frederick Doyle from a specialized photogrammetric institute standpoint.

Dr. Rosenberg will try to point up and bring together some of the ideas that have been advanced and show how our future photogrammetric work will depend upon the use of the basic sciences.

PHOTOGRAMMETRY: ITS SIGNIFICANCE, SCOPE AND CONTENT*

Professor Kenneth B. Jackson, University of Toronto, Toronto, Canada

MY TASK, as I understand it, is to identify photogrammetry as a subject—perhaps a little more fully than by quoting the definition in the famous MANUAL—to indicate its scope and content and to raise the question as to its place, if any, in one or another educational program.

In doing this, I intend to use a superzooper lens—seeing the woods before looking for the trees; recognizing a leaf before examining its parasites.

An event is something that happens at a particular place and time. The units of its four dimensions must be chosen to suit the event. Of space, they may be microns or light years. Of time, micro-seconds or mega-centuries. The photographer's flash and the pre-cambrian shield are "events" at suitable scales.

We humans can perceive such *current* events as come within the range and sensitivity of our senses. But we can resolve a sequence of events only when the change is slow enough or fast enough to be perceptible. We cannot see the movement of the hummingbird's wing or the growth of the flower over which it hovers—the speed of one is too fast; the other is too slow.

And when our observation is complete we are left with only remembered details modified by our conditioned interpretations of them. We may reduce our recollections to a sequence of words, numbers or even drawings with the intention of recording the meaning we have abstracted. And later, we or others, synthesizing our hieroglyphics, may acquire something of our original meaning, or may not. Such is the fate of much communication.

Current events become history far too rapidly for our slow faculties of analysis. We must have interpretable records of the present which we may study in the future in order to understand the past.

I wonder if even we really appreciate what a potent recorder of current events we have in the camera. The topography of our country is just one current event—though perhaps the one with which most of us are most concerned—but every observation we make, or would like to make, and every experiment we perform is a vulnerable current event which, without a current record, is in danger of passing into history either *un*-interpreted or perhaps worse *mis*-interpreted.

Of course, our problems are not solved simply by obtaining a record; they are merely preserved for solution.

Much time and energy is being spent here today on how to interpret such records. Perhaps more energy should be devoted to improving the records themselves, and the means of examining them to make them more definitely interpretable.

But the record is a permanent starting point and someday we may learn to

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