reader is already familiar with the additional phenomena and intricacies which arise when general boundary conditions and functionals are considered.

A sequel to the present book would be welcome. One which develops analogous results for general functionals and general boundary conditions including the bounded state variable case. It would be instructive also to develop a similar theory using generalized controls for problems whose solutions are not minimizing but become minimizing when suitable isoperimetric conditions are adjoined. Many problems in mechanics and in the theory of geodesics are of this nature. It should be noted that most examples appearing in the literature deal only with ordinary controls. Perhaps this is because their solutions involve only ordinary controls. There are, of course, examples which require generalized controls. As has been pointed out by E. J. McShane there is a need for developing techniques for solving typical examples from the point of view of generalized controls even when the solutions are given by ordinary controls. The remarks of McShane are given in *The calculus of variations from the beginning through optimal control theory* appearing in Optimal Control and Differential Equations, Academic Press, 1978, edited by A. B. Schwarzkoff, W. G. Kelley, and S. B. Eliason.

The book by Gamkrelidze is an important and welcome contribution to the literature on optimal control theory.

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Extremal graph theory, by Béla Bollobás, London Mathematical Society Monograph No. 11, Academic Press, London, New York and San Francisco, 1978, xx + 478 pp.

Problem Solving holds an awkward place in mathematics. Everyone agrees it is fun but some question its importance. If Mathematics is the building of a castle of Theory then there is perhaps little place for the solution of an individual problem. Yet, for others, the solution of problems is far more than an amusing pastime. The creation and solution of problems determine the direction of mathematical thought. Which of these is the correct view? An easy answer is, of course, both. But the relative importance given to these not necessarily antagonistic viewpoints helps determine the nature of our subject.

Problem Solving has long played a vital role in Graph Theory. This has led to a certain subjectivity regarding the importance of any particular result. There are a myriad of possible problems and papers flood into the already overcrowded journals. Recognition of meaningful work becomes difficult but it is not impossible. With the passage of time the main currents of Graph Theory become clearly marked and the separation of the important from the mundane may begin.

Extremal graph theory is an important addition to the Graph Theory literature. There is a staggering amount of material here. Throughout, theorems are treated not as isolated results but as part of a cohesive whole.