

EDITORIAL
LETTER WRITING

We want to make a strong plea for an improvement in the composition of Letters. Most Letters seem to have been written for a small group of insiders only. Physicists interested in a different research field often question the importance and urgency of Letters of which the meaning escapes them completely. In spite of the growing specialization it is still possible to communicate the significance of notable new discoveries and theories to all colleagues without having to resort to popularization. A change in the style of Letters can help in approaching this desirable goal.

There must be several ways in which a Letter can be written so that it is understandable to more physicists than just the specialists. As an example we recommend a study of the way in which that eminent teacher Paul Ehrenfest wrote his own articles.¹ When reading a paper Ehrenfest looked for what he called its "patent claim." It is that statement in the paper which marks its essential distinction from past knowledge; it is thus its main contribution. He also tried to locate "the moment when the frog jumps into the pond," which means the place where the author introduces a new argument or an experimental modification essential for the proof or justification of his "patent claim." In many papers this crucial "moment" is so obscured that it seems that the author did not clearly realize which new assumptions he used to reach his conclusions.

Ehrenfest believed that each section of a paper should begin with a concise statement of its aim and its assumptions so that the reader's attention is focussed on the relevant arguments in that section. Secondary arguments, such as mathematical derivations, should be omitted or put in an appendix so as not to interrupt the discussion. The result can be a very clear paper appealing to many readers and moreover it can be kept short. It is for these reasons that we would like to see more Letters following this style. Reading such a Letter or Article is like visiting a museum with a guide who points out its treasures. It is true that an expert does not need a guide and prefers to decide for himself which

¹P. Ehrenfest, Collected Scientific Papers, edited by M. J. Klein (North-Holland Publishing Company, Amsterdam, 1959).

among the many objects are the real treasures, but not only experts should enjoy an exhibit.

In the traditional way of writing physics papers the author takes the reader along his own path of reasoning expecting him in the end to arrive, as if independently, at the same conclusion as the author. Though the printed reasoning may have been rationalized, this method is a most excellent and convincing way to present the work to those readers who are thoroughly familiar with the subject. For the uninitiated, however, reading the paper is like visiting, without a catalog, an overfilled museum of unfamiliar art; he does not appreciate the exhibit and gets tired instead.

It is not easy to compose a Letter that is both clear and short since this requires that the author himself decide which are the most relevant aspects of his work. Some authors are reluctant to omit anything at all, believing that every detail is needed to convince the reader. Moreover, whereas most authors are willing to consider criticism regarding the physics in their papers, very few are favorably disposed towards a suggestion that presentation could be improved. We often envy the editors of commercial magazines who place the interest of their readers before that of the authors.

S. A. Goudsmit