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done." But even this admirer must observe that when he says this he is making precisely the kind of remark that philosophers during the last three thousand years have distinguished themselves by making. This makes an appraisal of his claim somewhat difficult. Professor Morris, with the acuity which marked his book *Signs, Language, and Behavior*, analyzes science and the humanities as *complementary* activities. The "gap" in our scientific vs. humanistic outlook is bridged by Morris in noting: "The scientist cannot be blamed if others fail in their responsibility to perform adequately their complementary tasks" (p. 98). Morris pleads for an interdependence of outlook between science and the humanistic disciplines—a message which is timely at this stage in the development of our pedagogy.

The book concludes with Howard Mumford Jones' essay "A Humanist Looks at Science". This is a masterpiece of style—something which one has learned not to expect from a professor of English. His autobiographical reflections on his personal problem of communication with science caps the entire volume as the over-all theme of this well-edited book. Were not Jones' essay a perfect climax to this symposium, it ought to be read first. There could not be a better statement of the occasion for these essays. The symposiasts, the American Academy of Arts and Sciences, and the editor have given us something here which is as delightful as it is illuminating.

La Constitution des Molécules. By J. Barriol. 258 pp. Gauthier-Villars, Paris, France, 1958. \$5.25. Reviewed by R. Bruce Lindsay, Brown University.

MODERN theoretical physics and theoretical chemistry on the atomic level have become so nearly identical that instructional material tends nowadays to follow quite similar lines in the two formal disciplines. This is well exemplified in this book prepared by Professor Barriol of the Faculty of Science at the University of Nancy and based on lectures given there in recent years in preparing students for the certificate in chemical physics. It is a well-written, relatively brief text in molecular chemistry prefaced, as all such works must now necessarily be, by an introduction to the concepts of quantum mechanics. These are briefly applied to the polyelectronic Bohr atom. The rest of the treatment mainly concerns the properties of the chemical bond. There are chapters on both the ionic and covalent bond with numerous simple applications. Much attention is paid to the structure of organic compounds and the method of molecular orbitals is elucidated. The book closes with a study of bonding in the solid state and in associated liquids.

The style is clear and the analysis has been kept simple. There are numerous problems for the student to work out, a somewhat unusual feature in French scientific texts. The bibliographical references are rather sketchy, but probably adequate for the purposes the author had in mind.

PHYSICS TODAY

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