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BORDERLANDS IN SCIENCE[1]

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THE PROBLEM

THE conventional classification of knowledge into the several organized categories, such as physics, medicine, biology, etc., is merely an artificial device largely for our convenience; a device that, unfortunately, tends to emphasize the difference between bodies of knowledge and in consequence minimizes unduly their similarities. Knowledge itself is continuous; its growth means multiplication of categories. Out of the old natural philosophy we carved chemistry, physics, botany and zoology. Within chemistry we now recognize such subdivisions as inorganic chemistry, organic chemistry, colloid chemistry and the like.

In general, these subdivisions within a given field are well sponsored by the parent science. With the growth of knowledge there comes inevitably the development of important fields lying between sciences. Some of these fields are adopted by one of the contiguous sciences; thus we have physical chemistry within the field of chemistry and astrophysics largely within the field of astronomy. Other of these subjects frequently develop into sciences which attain almost an independent status, as is illustrated by biochemistry.

There is, however, between the conventionally recognized divisions of science an extensive "no man's land," many parts of which are of great importance but which, for want of adequate sponsorship and because of certain inhibitions in connection with re-

[1] These observations are drawn largely from the discussions of this subject in meetings of committees of the National Research Council during the past year. They are presented not as a special statement from the Council, but as an individual article with the hope on the part of the author of eliciting further comment from others who may be interested in this matter.