The preponderance of illustrative material from Pacific coast flora may limit the book's utility outside that region, although some may consider its restricted taxonomic and geographic scope a pedagogic virtue. Six pages are devoted to cytological technique, yet chromosomes are illustrated in only one figure and are discussed rather briefly (despite a chapter entitled "Data from cytogenetics"). There is a fine dedication to Harvey Monroe Hall, an American pioneer in the field of biosystematics, who was responsible for the direction taken by a considerable portion of taxonomic research carried on in the United States during the middle decades of this century. Curiously, however, Benson devotes little space to the school of genecology inspired by Hall and Göte Turesson or to the work of Hall's colleagues and successors—Clausen, Keck, and Hiesey.

Among this book's assets are the copious and excellent illustrations, the portions dealing with description and documentation, and the comprehensive up-to-date bibliography. The book is an honest and sincere presentation, but its unevenness may prevent its wide use as a text and thus cause it to miss the audience for which it is primarily intended. It should be read by every botanist interested in systematics, for it is a readable résumé of Benson's own work on oaks and buttercups.

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I.Q., an Oversold Concept

Creativity and Intelligence. Explorations with gifted children. Jacob W. Getzels and Philip W. Jackson. Wiley, New York, 1962. xvii + 293 pp. Illus. $6.50.

This book reports an important piece of psychological research carried on in the late 1950's at the University of Chicago. As the phrase "gifted children" will suggest to those who are familiar with the psychological literature of the past 40 years, the study stems basically, although at some distance in time, from Lewis M. Terman's pioneer work with gifted children (defined as children with an I.Q. of 140 or greater) in California. The Getzels and Jackson study is also, and perhaps this is its greatest significance, an astringent corrective to the oversold concept of the I.Q. and its accompanying test paraphernalia. The I.Q., in the hands of officious school counselors and credulous school administrators and teachers, has for several decades cowed children and their parents with the idea that the quantity of a fixed, real, given-by-nature, precisely measurable, and important trait called intelligence, to which a single number could be attached, had been ascertained with exactness in that particular child's case. And of course it was almost as bad to have a very high I.Q. as it was to have a very low one; in either event, the expectations were definite, and the student's self-esteem inevitably suffered abrasions at some time or other.

Getzels and Jackson were by no means the first psychologists to recognize the folly of this system, nor for that matter were they first to carry out investigations establishing the relationship of measures of general intelligence to measures of creativity. Their contribution lies rather in their dramatic use of the test results, especially in the telling individual cases they report, and in their informed and penetrating discussion of the issues upon which their data shed some light.

The data themselves consist of intelligence test scores, creativity test scores, and measures of scholastic achievement of some 500 boys and girls in grades 6 through 12 in a private school in the Chicago area. On the basis of a rational combination of the intelligence test scores and the creativity scores, two small groups, of 26 and 28 students respectively, were designated as "High Creativity" and "High Intelligence." These two groups, which proved to be about equal in academic achievement in spite of marked I.Q. differences, were contrasted in terms of values and of cognitive style exhibited in other test performances. The "high creativity" subjects showed significantly more humor, playfulness, incongruities, unexpected endings, and stimulus-free (as opposed to perceptually rigid or stimulus-bound) themes in the stories they invented, and more violence as well, it may be noted. In values, "high intelligence" subjects put more emphasis upon conventional success and upon conformity to adult values as desirable goals.

The data are slight in themselves and would not warrant the far-reaching interpretations the authors have placed upon them were it not for their internal consistency and sensibleness as well as their neat dovetailing with a host of other findings that are emerging from an impressive volume of recent research on creativity in a wide variety of settings. Getzels and Jackson seem to have summed up the tenor of much of this recent work in their own study.

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Cancer Cell Behavior

An Introduction to the Biochemistry of the Cancer Cell. Harris Busch. Academic Press, New York, 1962. xiv + 424 pp. Illus. $13.50.

In this timely book Harris Busch has attempted to look at the cancer cell in the light of the impressive strides made in biochemical genetics during the past decade. It is not surprising that the discussion is limited in its scope, since consideration of the cancer cell is equivalent to the consideration of the whole field of cellular biochemistry. Busch has focused his attention here on aspects of cancer cell behavior. He considers the chemistry of nuclear structures and their roles in protein synthesis, and he draws heavily on his own studies on the chemistry and metabolism of nuclear proteins in normal and neoplastic tissues. The relationship of this genetic discussion to cancer is brought out in a chapter on cancer chemotherapy and in a chapter that deals with carcinogenesis.

The second part of the book deals with what Busch calls the phenotype of cancer cells. This designation seems somewhat forced, since no common phenotype in cancer cells is apparent, save perhaps the tendency of most tumors to have high rates of aerobic and anaerobic glycolysis. The discussion of toxohormone, an agent from tumors which suppresses the activity of liver catalase, is very good. A chapter on mucoproteins, better designated as glycoproteins, is interesting but not very pertinent to any "cancer cell phenotype." Cancer antigens, paraproteins associated with plasmocytomas, are also considered.

The author has contributed considerably to knowledge on the interplay of glycolysis and amino acid metabolism and to the utilization of plasma