I will be asked: "Do you seriously want to make such a statement? Do you not see that the consequences of such a theory are more than daring, that they would be nearly insane? Do you really mean to say that an orchid or an elephant should have been instantaneously created out of nonliving materia?"

Yes, I do. And, please, reflect, because now *I* am going to put a question: Is the elephant of today "ready-made"; does it not originate from gametes? You must admit the truth of the latter statement. Why, then, assume that the f i r s t elephant appeared as the fully formed animal? He was created as a gamete, unicellular, a monocyte.

For those who may be inclined to side with Lyell and against Cuvier as far as the major premises of this argument are concerned, it must be said that there is a great accumulation of information about genetic processes and the biochemical nature of chromosomes in these two volumes of fact and fancy. Such works also serve another useful function (in addition to keeping printers employed): they challenge us to tighten our own arguments, for up to the point where the author takes his flier into paleontology, his criticism of evolutionary theory is philosophically respectable.

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The Size and Growth of Tissue Cells. Joseph G. Hoffman. Thomas, Springfield, Ill., 1953. xv + 102 pp. Illus. $4.

A century of investigation has left the basic questions regarding specific cell sizes in a most unsatisfactory state. Characteristic shapes and, to a lesser extent, size and staining qualities still constitute the major criterions of recognition. Pathologists long ago disagreed on the question of size alone as a characteristic of malignancy, yet the author of this small monograph wishes to reexplore the phenomena of volume increase and volume ratios from the point of view of cancer research. In his introduction he states that it was undertaken "in the belief that proper measurements and analysis of the sizes of cell parts can ultimately yield information about growth." Maybe so, but no proof is given.

It is unfortunate that so much of the book is taken up with background explanations of the importance of the problem and so little is devoted to its solution. Two short chapters discuss variations in intermitotic time periods and inadequacies of mitotic index values. In the final chapter an interesting conclusion is that the nuclei of mouse *dbr* tumor cells may grow linearly, while the cytoplasm grows exponentially. No effort, however, was made to discuss the importance of factors such as aneuploidy or fixation shrinkage. Most students of the cell will be disappointed by the volume. The real key, which biologists still lack, is a fundamental theory of the cell nucleus.

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New Books

Fortschritte der Chemie Organischer Naturstoffe, vol. 10. L. Zechmeister, Ed. Springer, Vienna, 1953. ix + 529 pp. Paper, $19; cloth, $19.80.

The Biochemistry of Clinical Medicine. William S. Hoffman. Year Book Publ., Chicago, 1954. xx + 681 pp. Illus. $12.

General Chemistry. P. W. Selwood. Holt, New York, rev. ed., 1954. xii + 657 pp. Illus. $6.

Economic Activity Analysis. Oskar Morgenstern, Ed. Wiley, New York; Chapman & Hall, London, 1954. xviii + 554 pp. $6.75.

American Thought. A critical sketch. Morris R. Cohen. Free Press, Glencoe, Ill., 1954. 360 pp. $5.

World Geography: An Introduction. Loyal Durand, Jr. Holt, New York, 1954. vii + 372 pp. Illus. $5.25.

The Giant Cactus Forest and Its World. A brief biology of the giant cactus forest of our American southwest. Paul Griswold Howes. Duell, Sloan & Pearce, New York; Little, Brown, Boston, 1954. xxv + 258 pp. Illus. + plates. $7.50.

Bilder zur Qualitativen Mikroanalyse Anorganischer Stoffe. Von Wilhelm Geilmann. Verlag Chemie, Weinheim/Bergstr., 1954. 120 pp. Illus. DM. 20.80.

Chimica Generale E Inorganica. Giuseppe Bruni. Libreria Editrice Politecnica Tamburini, Milan, Italy, ed. 9, 1954. xx + 793 pp. Illus.

General College Chemistry. Andrew J. Scarlett and José Gómez-Ibáñez. Holt, New York, 1954. x + 645 pp. Illus. $6.

Thermo-Mikro-Methoden. Ludwig Kofler and Adelheid Kofler. Verlag Chemie, Weinheim/Bergstr., 1954. xi + 608 pp. Illus. DM. 39.80.

Information Theory in Biology. Henry Quastler, Ed. Univ. of Illinois Press, Urbana, 1953. 273 pp. Illus. Paper, $4.

College Botany. Harry J. Fuller and Oswald Tippo. Holt, New York, rev. ed., 1954. xiv + 993 pp. Illus. $6.90.

Elsevier's Encyclopaedia of Organic Chemistry. Ser. III, Carboisocyclic Compounds; vol. 12B, Naphthalene; sec. A. Compounds containing one naphthalene nucleus. F. Radt, Ed. Elsevier, Amsterdam-Houston, 1953. xlviii + pages 3261–3964. Single issue, $66; series subscriber, $58; complete subscriber, $50.

Reports on Progress in Physics. vol. XVII (1954). A. C. Stickland, Ed. Physical Society, London, 1954. 280 pp. Illus. £2 10s.

Qualitative Analysis and Chemical Equilibrium. T. R. Hogness and Warren C. Johnson. Holt, New York, ed. 4, 1954. xiii + 621 pp. Illus. $5.

Elements of Statistical Mechanics. D. ter Haar. Rinehart, New York, 1954. xix + 468 pp. Illus. $8.50.

Tables Numériques de Physique Nucléaire. Charles Noël Martin. Gauthier-Villars, Paris, 1954. 258 pp. Paper, $5.15; cloth, $6.79.

Mathematical Thinking in the Social Sciences. Paul F. Lazarsfeld, Ed. Free Press, Glencoe, Ill., 1954. 444 pp. $10.

Heat Transmission. William H. McAdams. McGraw-Hill, New York–London, ed. 3, 1954. xiv + 532 pp. Illus. $8.50.

Les Constantes Physiques des Composés Organiques Cristallisés. J. Timmermans. Masson, Paris, 1953. 556 pp. Illus. F. 5200.

Beyond the Germ Theory. The roles of deprivation and stress in health and disease. Iago Galdston, Ed. Health Education Council, New York, 1954. viii + 182 pp. Illus. $4.