



One of the Melias Islands in the bay at Guaymas, Sonora, Mexico, as it appeared in 1903 (upper) and 1961 (lower). The giant cactus, *Pachycereus pringlei*, has greatly increased in number during the 58-year period. The census in 1964 was 5836 or more than 8000 cacti per hectare. Such dramatic changes in the landscape of southwestern North America may be related, at least partly, to changes in climate. [University of Arizona Press]

operative. The upward migration of oak and mesquite and the increase of cardon (a giant cactus) on ungrazed areas are consistent with such changes as the northward shift of Atlantic fisheries, glacial retreat in Alaska and Norway, and the incidence of birch disease in Maine.

Whether or not the warming/drying development that is indicated represents a major or minor trend in the long swing of climatic history, it is clear that the advent of modern man catches the desert region at a vulnerable time. This region, despite the more obvious, often more destructive types of exploitation,

is a tremendous national asset. The inflow of visitors and permanent residents is proof enough that, like a basket of eggs, it should be handled with care.

The authors deserve great credit, not only for their considerable labor and scientific caution, but for the clarity and interest of their writing. Their work should appeal to the growing number of amateurs who are learning to appreciate the desert region, as well as to those whose concern is more technical.

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Looking Backward at Science Fiction

Of the hundreds of science-fiction anthologies published during the last quarter century, **Future Perfect: American Science Fiction of the Nineteenth Century** (Oxford University Press, New York, 1966, 415 pp., \$6.50) is one of the most unusual. The editor, H. Bruce Franklin, associate professor of English at Stanford University, has collected 21 19th-century American sci-

ence-fiction short stories and novelettes, from Hawthorne's "The Birthmark" (1843) to Stanley Waterloo's "Christmas 200,000 B.C." (1899). The title is misleading, because it gives the impression that the book consists entirely of utopian prophecies. Only a very few stories fall into this classification. The tales are grouped as follows: Hawthorne, Poe, automata, marvelous in-

ventions, medicine men, into the psyche, space travel, and time travel.

Franklin has written an introduction to each group of stories and an introduction to each of the authors. The only volume with which I can compare *Future Perfect* is August Derleth's anthology *Beyond Space and Time* (1950), which included selected science fiction by authors ranging from Plato to Bradbury.

Some of the stories chosen by Franklin, such as Poe's "The Facts in the Case of M. Valdemar" and O'Brien's "The Diamond Lens," are already familiar to the *aficionado*, having been reprinted in other anthologies. Others are so obscure that only a specialist in the literature of this period would know them.

The tales vary widely in content and show that, half a century before the term "science fiction" was coined, a surprising number of authors were turning out imaginative stories of this kind. J. D. Whelpley's "The Atoms of Chladni" (1859) is of interest to the historian of technology, for it contains the only fictional prototype of Edison's phonograph that I have ever seen.

Aside from their interest as literary curiosities, the stories also vary widely in readability. By and large, fiction does not travel well in time. Most of Shakespeare's jokes fall flat today. Only a small fraction of the stories composed centuries ago—an occasional *Odyssey*, or *Sindbad*, or *Don Quixote*—are still readable for enjoyment. A host of other stories that have survived from bygone times are endurable only by graduate students, who mine them for theses. Most of Franklin's stories have the besetting faults of Victorian fiction: wordiness and sentimentality. Some—like S. W. Mitchell's "Was He Dead?"—overcome these shortcomings; others do not.

For instance, Franklin no doubt felt he had to include a story by Edward Bellamy, whose *Looking Backward* made such a stir and furnished the model for so many socialistic utopias. Yet, viewed solely as a storyteller, Bellamy is, in my opinion, one of the duller influential writers who ever lived, with the possible exception of Proust. However, Bellamy's contribution, "The Blindman's World" (1886), has one point of interest: He gets his hero to Mars by a method much like that by which Edgar Rice Burroughs, a quarter century later, sent John Carter to the Red Planet.

I cannot recommend this book for the ordinary newsstand buyer of science fiction who wants merely an hour's fast-paced escape reading and cares nought about the genre from the literary or historical point of view. He would find some of these tales, exhumed from bound volumes of century-old magazines, pretty hard going. On the other hand, the serious reader, the collector, and the student of literature will find it a worthy addition to his library.

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Imitative or Innovative?

New Universities in the Modern World (Macmillan, London; St. Martin's Press, New York, 1966. 200 pp., \$5), edited by Murray G. Ross, is concerned with ten new universities that range geographically from India and Pakistan to Australia, Nigeria, England, and North America. Three of Great Britain's new seven are included, and two from the United States—the University of South Florida and the University of California at Riverside. The authors of the various chapters in this most useful book are presidents and vice chancellors who have played key roles in planning, building, staffing, organizing, and operating these new institutions.

One naturally expects this volume to be enspiriting and provocative—a chronicle of far-sighted planning to meet the educational needs of a new age. Such is not the case. The new universities have generally trailed after rather than led the social forces that called them into being. Breathlessness rather than prophetic foresight seems to be the climate of their birth.

The universities were often forced to develop much faster than their original plans envisaged. East Anglia opened earlier than planned; at the University of York eight colleges opened a year early in 1963 instead of 1964. And, says the president of York University, "if we were to start again, I think most of us at York would ask for more time, more staff, more money." Nowhere throughout the volume is there any indication that educational and social leaders in England were even aware of the population explosion, the impact of which could have been foreseen 15 to 18

years earlier. Only pressure from the surrounding society pried open the narrow doors to higher learning. In the United States projections were made as early as 1946 by President Truman's Commission on Higher Education. Because the problem was not imminent, few gave the report serious attention. The case histories in this volume provide ample evidence that societies throughout the world wait for the time of crisis to act.

Even more dispiriting than the lack of forward planning is the unenterprising character that most of the new universities adopted once they did get off the ground. "Pressures of time forced on the University a structure that, by and large, is rather conventional," writes the vice chancellor of Monash University.

At the University of California at Riverside, the designers of the curriculum were hedged about by certain traditional university practices characteristic of higher education in the United States. Even in East Pakistan University the pattern of the administration's structure was similar "to that found in other British Commonwealth Universities."

As far as methods of instruction are concerned, these new universities might just as well have been established in the medieval period, or even

in the third century when the rabbis prescribed in the *Talmud* the fixed teacher-pupil ratio. No means of communication other than by word of mouth in a small group is even recognized.

Nowhere in these "new" universities, for example, can one find any reference to the use of television for instruction, language laboratories, work-study programs, thoroughgoing curriculum revision, or other modern procedures rather thoroughly tried by older universities.

Can it be that the new universities are so much concerned with being recognized by the old that they become imitative and not innovative? Are the old new and the new old? As far as the accounts in this book are concerned, the new universities merely represent "old wine in new bottles." What a pity! Student populations are skyrocketing; not enough able faculty members are available to maintain quality in higher education; and exciting new resources and aids to learning are available. Perhaps what is needed now is a truly *new* new university, sponsored by an *old* university that can lay the groundwork for higher education in the 21st century.

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The Freud-Abraham Correspondence

For historians this volume of correspondence, **A Psycho-Analytic Dialogue: The Letters of Sigmund Freud and Karl Abraham, 1907-1926** (Basic Books, New York, 1965. 423 pp., \$7.50), edited by Hilda C. Abraham and Ernst L. Freud, between the founder of psychoanalysis and one of his ardent disciples, may be of some interest; *l'affaire Jung* and other political problems of the early psychoanalytic movement are candidly discussed in their letters. For psychoanalysts the volume will undoubtedly provide a basis for still more speculation on the alleged deep libidinal relation between Freud and his disciples: thus, in the introduction, one finds Edward Glover speaking of the transference and counter-transference relationship between Freud and Abraham.

However, for those interested in the scientific status of psychoanalysis this volume can only be a disappointment.

Neither Freud nor Abraham ever questions the basic assumptions so implicit in the correspondence: (i) that psychoanalytic clinical evidence is reliable; (ii) that psychoanalytic theory is capable of empirical tests; (iii) that psychoanalytic therapy is better than no therapy at all. But, of course, there is now good experimental evidence which suggests that psychoanalytic clinical evidence may be unreliable; there is good reason to suppose that psychoanalytic theory is not capable of empirical tests; and there is no positive evidence which indicates that psychoanalytic therapy is better than no therapy at all. Thus the claim on the dust cover that this volume gives "a close-up of a science in the making" is hardly justified.

What we do see primarily in this close-up of a "science" in the making—once political and personal matters are put aside—is Freud congratulating Abraham and Abraham congratulating