Book Reviews

Transitional Societies and Economic Development

Politics, Personality, and Nation Building. Burma's search for identity. Lucian W. Pye. Yale University Press, New Haven, Conn., 1962. xx + 307 pp. \$7.50.

In the preface the author describes how his work led him increasingly to concentrate his interest on the question: "Why should transitional societies have such great difficulties in creating an effective modern state system?"

This study of Burma, based on a large number of interviews as well as on published material, shows how complex this question is. In terms of a number of indexes, Burma is a fairly typical underdeveloped country. But it is also a country with obvious potentialities for development. There is no shortage of natural resources. The average Burmese farm has about ten times the area of the average Japanese farm, and the cultivated area could easily be extended. There are also considerable resources in minerals and timber and a fairly adequate communication network. The population has quite a high rate of literacy and a higher proportion of people with technical education and administrative experience than many other underdeveloped areas. In the years before 1941, economic development was rapid and the peasants were changing into commercial farmers. In spite of these potentialities, development has been very slow. "The fact that Burmese production, fifteen years after World War II, has just been restored to prewar levels suggests that the obstacles to its development may fall largely in the realm of political relations, psychological attitudes, and cultural values. Thus an examination of the difficulties the Burmese have been experiencing should draw attention to the subjective obstacles to development which presumably are also at work

beneath the surface in other underdeveloped countries" (page 60).

Though the author has chosen an interesting and important question for study, his results are rather disappointing. Many people in Burma are worried about the slow economic progress and lack of political stability in their country. A satisfactory analysis of "the subjective obstacles to development" should at least suggest the issues on which they would have to concentrate their efforts in order to secure development. And, if similar obstacles to development are at work in other societies, a satisfactory analysis would help those responsible for economic aid programs in deciding where purely economic aid is most likely to produce results. However, what people with such practical interests would find in this book is a lot of very interesting material on "political relations, psychological attitudes, and cultural values," much of which may be relevant to their problems, combined with an analysis that always seems to stop before it reaches the point at which it could yield any practical implications, even in the limited sense of suggesting which factors are most important.

Consider, for example, the passages that put considerable emphasis on the way in which Burmese mothers treat their children, which "tends to vacillate between extremes of warmth and affection and of disinterest and exasperation" (page 182). This, it is argued, produces "a peculiar blending of a perennial capacity for optimism with a diffuse, all-pervasive distrust and suspicion of others in any particular relationship" (page 185). Now, if this factor were really as important as the author sometimes seems to suggest, it would have very far-reaching practical implications. Any patriotic Burmese, concerned for the long-term future of their country, should take pains to bring up their children in a nontraditional way. More generally, statesmen in any country concerned with long-term issues should attach the greatest importance to fashions in the treatment of small children. But there is nothing to indicate that the author has ever seriously considered the underlying question: How far is the character of any society determined by the experiences of its members during their infancy?

One could make similar criticisms of other parts of the book. There is interesting information related to something which may be a "subjective obstacle to development" but no attempt to evaluate the importance of this particular factor in a total explanation or to discuss whether this particular obstacle, if important, would be easy or hard to remove.

There is also an unexplained rejection of some possible simple explanations. There is, for example, no mention of the assassination of Aung San and his cabinet, except in one indirect reference. The author has implicitly rejected the theory that the personality of a leader may have a decisive influence at a critical period. It could, however, be plausibly argued that Burma would be very different if Aung San had survived, that he could have made the transition from revolutionary leader to constructive statesman and would have had the power necessary to implement constructive policies. Again, the lack of initiative in the civil service, for which the author gives some very complicated explanations, can be very simply explained by the cases in which civil servants who tried to show initiative were penalized by politicians. And it is quite understandable that people who had risen to power through revolutionary politics should wish to assert themselves against those who had started good careers under the colonial regime.

Considering the book as a whole, one cannot help asking why a writer of obvious ability, who has chosen such an important question for study and who has collected so much interesting material related to it, should end by giving so little to answer his question. Part of the explanation may be the influence of language on thought.

There are some contexts in which plain and simple English is inappropriate. It may be awkward or even impossible to discuss some subjects except in technical terms, and a need for special precision and accuracy may require the use of extra words. But something has gone wrong when an author consistently uses far more words than are necessary to express his ideas and employs abstract and technical terms to say things that could have been put more clearly in simple language. Consider, for example, a passage on page 123 explaining that political cultures vary both in the extent to which people trust predictions from some minority as compared to their own empirically tested judgments and also in the type of person whose opinions are so trusted; in some societies people trust priests, in others business men, in still others scientists. This has paraphrased in 49 words almost all the unambiguous meaning from an original passage of 228 words. The idea which this paraphrase has expressed by the words, "... both in the extent ... and also in the type . . ." is amplified by a complete sentence in the original: "With respect to this dimension, all specific political cultures can be classified along a continuum and according to a typology."

In writing like this the author is only following a fashion. But why should such a style be fashionable in some academic circles? It can be explained as the product of a culture in which people write primarily for prestige, not because they have something interesting or important to communicate. A style which can give the simplest statement a superficial appearance of complexity and profundity is very convenient for someone who wishes to raise his academic reputation by publishing, though he really has very little to say. But it is a very serious hindrance to someone who, like the author, is trying to answer an interesting question. It may be possible to think clearly and write in this style but it is almost certainly very difficult.

If the author had had the courage to be unfashionable by expressing his ideas as clearly and simply as possible, it would then have been obvious that his analysis had hardly begun to answer his original question, Why should transitional societies have such great difficulties in creating an effective modern state system? And he would have saved so many words that a half or more of the book could have been devoted to working out an analysis that did provide at least the general outlines of a possible answer.

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Modern Applications

Classical Electrodynamics. John David Jackson. Wiley, New York, 1962. xvii + 641 pp. Illus. \$13.

Jackson's book satisfies the longstanding need for an advanced, graduate level, textbook on classical electromagnetic theory, oriented toward modern applications. The best texts previously available, such as Panofsky and Phillips' Classical Electricity and Magnetism and J. Stratton's Electromagnetic Theory, are well suited for a senior course and for the needs of many graduate students, but they are not sufficiently sophisticated for another group of graduate students interested in modern physics, those with an undergradubackground in electricity and ate magnetism and certain mathematical methods. By failing to take advantage of an early use of advanced mathematical methods and of relativistic covariance, these books proceed more slowly than necessary and thus restrict the time available for examining the properties of complex electromagnetic systems and for considering several of the many important applications to modern fields of research. Another group of texts, such as Landau and Lifshitz's Electrodynamics of Continuous Media, is too specialized to serve as the only text for an entire course. As a result the student in an advanced graduate course had no single book to serve as a focus, but only 'reference material.' While graduate students should indeed be expected to use reference material, a central textbook makes it unnecessary for them to buy several books or to spend much additional research time in the library. I have had to recommend that students in a two-term graduate course use not only the previously mentioned texts but several other texts on tensor analysis, relativity, rotation groups, mathematical methods, and magnetohydrodynamics, as well as journal references.

The book presently under review reduces greatly the need for other reference material, although it does not eliminate the usefulness of specialized references. Subjects included in this text are vector multipole expansions, diffraction, wave guides and cavities, magnetohydrodynamics and plasma physics, charged particle scattering and *bremsstrahlung*, particle orbit calculations, and radiative reaction.

In addition to covering the classical material in fields of contemporary in-

terest, such as plasma physics and bremsstrahlung, the author uses every opportunity to note where the classical picture breaks down and to sketch in the qualitative quantum mechanical effects. He introduces the concepts of de Broglie and Compton wavelengths, and of quanta of energy, momentum, and angular momentum. He "second guesses" these into quantitative corrections, and even introduces the Klein-Nishina formula. This undoubtedly acts as a stimulus to those students interested in modern quantum physics, and it puts the classical theory into perspective. However it seems to me that, in this context, there are drawbacks in the extent to which this treatment is pursued. It is not necessarily helpful to the student to be introduced to important quantum mechanical and quantum field theoretical effects as intuitive corrections to classical problems. The lack of a well-defined quantum approach can lead to more incorrect than correct answers in the hands of those not already thoroughly acquainted with quantum principles. The well-defined nature and unity of the quantum approach is obscured here, and, in addition, the full range of the classical theory is not always explored, for quantum effects are referred to as dominating in that region. For instance, a more complete classical discussion of renormalization and a consistent point electron picture, as discussed recently by F. Rohrlich, may be more useful to the student when he eventually tackles the quantum field theory problem than the brief quantum discussion given in this book. A chapter on the macroscopic electromagnetic properties of crystal media may be more useful in the context of a course on electromagnetic theory than a long discussion on quantum mechanical features of photon and charged particle scattering. Companion textbooks on classical and quantum mechanics, with cross references, would be a more effective approach, in my opinion.

While the book is generally excellent in developing physically meaningful and mathematically correct derivations of important results, the derivation of the frequency distribution of Cherenkov radiation (page 497) is more than "nonrigorous," as described by the author. This derivation, which is based on a formula that omits the velocity field altogether, would seem to be entirely fallacious. It should also be noted with respect to formula 17.62, for the angular and polarization dependence of