veaux suivants: Phonétique et phonologie, Les méthodes de la grammaire, Sémantique et lexique, Les nouvelles voies de la stylistique. L'éminent linguistique qu'est Arcaini va ici bien au-delà d'un éclectisme trop rapide; on s'en rend bien compte en relisant son examen critique des diverses théories sur la grammaire: depuis le mentalisme de Sapir, suivi du behaviourisme de Bloomfield, en passant par la théorie de la translation selon Tesnières, pour venir finalement à Chomsky et à Martinet.

"Les implications méthodologiques" forment le troisième et dernier volet de cet ouvrage. Tout enseignant des langues estimera fort utile de pouvoir examiner ici un modèle d'étude phonologique contrastive entre l'italien et le français. La discussion sur l'autonomie respective des systèmes de l'oral et de l'écrit donne lieu à une démonstration intéressante. Retournant au schéma de la communication et à l'aide aussi de la théorie de l'information, l'auteur montre bien quel contraste le phénomène de la redondance établit entre les réalisations linguistiques des deux systèmes distincts. On notera également, dans ces "Implications méthodologiques," bonnes suggestions sur la facon de mener l'étude du lexique, comme sur le rôle et les circonstances de l'exercice de la traduction.

Il convient de signaler que ce livre s'adresse plutôt aux personnes férues de bonnes connaissances linguistiques. Sans cette préparation, on trouvera cet ouvrage d'une lecture laborieuse et l'assimilation en sera assez ardue. Sans doute les points de vue didactiques n'y manquent pas, mais ces aspects sont encore dans la sphère intermédiaire entre la science spéculative et les méthodes particulières de l'enseignement des langues; ils deviendront d'une utilité immédiate pour l'enseignement, après seulement qu'ils auront été intégrés dans des guides pédagogiques plus concrets.

> André Provencher Université McGill

Madan Mohan and Ronald E. Hull, eds. INDIVIDUALIZED INSTRUCTION AND LEARNING Chicago: Nelson-Hail, 1974. 440 pp. \$14.00.

Fred S. Keller and
J. Gilmour Sherman.
THE KELLER PLAN
HANDBOOK: ESSAYS ON A
PERSONALIZED SYSTEM
OF INSTRUCTION.
Don Mills, Ontario:
W. A. Benjamin, 1974.
99 pp. \$4.25.

J. Gilmour Sherman, ed.
PSI PERSONALIZED SYSTEM
OF INSTRUCTION:
41 GERMINAL PAPERS.
Don Mills, Ontario:
W. A. Benjamin, 1974.
225 pp. \$7.25.

Mohan and Hull have compiled thirty-one articles and addresses as representative of the "best thinking on individualized instruction." well, three appendices guide readers to pertinent references, materials, and programs of individualized instruction. The first section on the philosophy and rationale of individualized instruction includes now familiar articles by Bloom, Skinner, and John Carroll and lavs the groundwork for the following four sections concerned primarily with the application of these principles and the implementation of individualized instruction programs.

A number of important programs are described and related issues discussed in sections headed "Some Approaches to Individualization," "Organizing for Individualization," "Individualizing Instruction in Various Content Areas," and "Evaluating Cognitive and Affective Outcomes of Individualization."

The notion that instruction and instructional materials must take account of individual differences and be consonant with the needs, aptitudes, and aspirations of the individual is hardly new; however, like some fundamental convictions, it has lain too deep for action. The first section renews that conviction by examining its implications and setting guidelines for action. Not surprisingly, the promise of the theoretical first section and, I should add, the clarity do not carry through to the accounts of the practical implications of individualization. The mass of necessary organizational detail and at times the attendant educationese can prove heavy going. A typical example of the latter: "The implications of values are with respect to the pupil-teacher reflection and teacher skill with the clarifying response." (p. 174).

On the other hand, the book does "provide useful guides and suggestions" for individualizing instruction and learning; it should find use as a reference work and as a supplementary textbook. The bibliographies at the end of each article, the appended list of materials and "Projects on Individualizing Instruction" are useful.

And yet one comes away from these reports on functioning individualized programs convinced that somehow theory has been reduced in practice and that some basic educational values may have been abandoned for the more obvious performance-based benefits of individually prescribed instruction. My dissatisfaction does not lie with those programs that recognize individualization as most productive in those areas of the curriculum where precise objectives can be formulated and a sequence of learning activities devised to attain them. My complaint is rather with those models of individualized instruction that prescribe individualization on a school- and even a system-wide basis for all or most areas of the curriculum, models that, assuming an easy access to managerial skills and technology, can prescribe "the development of a school information system to provide data which will distinguish . . . [among

other things] each pupil in terms of his present levels of attainment, his potential for further learning, his special interests, his attitudes toward learning, his values, his work habits, and the effectiveness of his learning under alternative instructional procedures." (p. 180) This may be good in intention; but its implications are disturbing. For one, there is an inordinate faith in the infallibility of diagnostic and predictive instruments. I wonder whether such programs do not ensure that aptitude (as tested) becomes destiny. There is little room, I assume, for whim or fancy or even overreaching expectations. In the interests of accountability and an efficient use of human and material resources, an elaborate and closely monitored tracking system makes certain that pupils are directed to instruction and material consonant with their diagnosed needs and limitations.

Again, practical constraints operate to reduce available options in instructional modes to primarily the selfinstructional. While instruction in groups is available, it is for relatively short periods of time and for specific purposes - too short and too specific. maybe, to induce the exploratory and collaborative interaction that familiarity within a group makes possible. If there is a fundamental weakness in this book it is that the editors have failed to echo and thus recognize the serious doubts that must arise in the minds of readers as they follow these accounts. The brief introductions at the head of each section might have been used to do more than merely summarize the contents of the ensuing sections.

The books on PSI (Personalized System of Instruction) avoid the pit-falls of the preceding text. They are less ambitious: PSI is only one mode of individualizing instruction. They provide adequate detail for what is basically a simple model, they anticipate questions and above all, they identify limitations. Whereas the Mohan and Hull book is directed to individualizing instruction primarily at the elementary and secondary school levels, PSI has been developed

and tested for use at the post-secondary level. This is probably why the Mohan and Hull book makes no reference to PSI; however, I can see how PSI can be used in schools.

PSI or the Keller Plan (named after Prof. Keller who with a colleague, Prof. Sherman, developed this. method of instruction just over ten years ago) is characterized by selfpacing — the student moving at his own pace through small sequential units of study, mastery learning or "unit perfection requirement for advance," and the use of proctors (usually students who have completed the course) to provide immediate feedback on tests as well as tutor individuals experiencing difficulties. Proctoring provides the "personalized" feature of PSI. Lectures and demonstrations are an added bonus for those who have completed a specified number of units; however, attendance is optional. Some of these features are in common with a number of recent innovations in instruction; but the authors make no claim for originality, although the use of proctors and the basis in Skinnerean positive reinforcement learning theory may be the special features of PSI.

The Keller Plan Handbook provides useful detail for those considering implementing PSI. Difficulties are anticipated and dealt with, not glossed over. The ideal is pointed to for guidance, but constraints are recognized. For instance, self-paced learning should not be undermined by end-of-semester deadlines. The grade "Incomplete" may remove the difficulty but it also encourages procrastination, one of the most frequentlyreported problems with PSI. Ways of dealing with the problem are discussed. It soon becomes apparent that PSI's superiority over conventional teaching is in those areas of the curriculum calling for mastery over limited content or developing a particular skill.

The effect of PSI: 41 Germinal Papers (about half of the forty-one have not appeared in print before) is to confirm that PSI has been subjected to numerous tests and compa-

risons with conventional teaching approaches and has been foound superior in that students in PSI performed at a significantly higher level in common final examinations, retained much more of what they learned over a longer period of time, enjoyed the process, worked harder and learned more efficiently.

The collection is well-balanced. The writers represent a variety of disciplines, the majority being in the areas of psychology and physics. Seven of the forty-one articles deal with problems, including one tongue-in-cheek "Fifteen Reasons Not to Use the Keller Plan." As is to be expected. there is much repetition of all toofamiliar details about the approach and the almost predictable successful results. A number of articles provide research data on various aspects of PSI. A section by Keller and Sherman on the history and theory of PSI concludes this collection.

The reader contemplating a PSI course should find the handbook and the collection of papers indispensable. Dyed-in-chalk-dust lecture enthusiasts may be challenged by these books at least to defend their practice.

Patrick Dias McGill University

David W. Champagne and Richard M. Goldman. HANDBOOK FOR MANAGING INDIVIDUALIZED LEARNING IN THE CLASSROOM. Englewood Cliffs, New Jersey: Educational Technology Publications, 1975. 200 pp. \$9.95.

This is an unconventional book. The reader may have to peruse it several times before seeing its significance. It is unlike those textbooks intended for study from cover to cover. No two teachers will work through the same units in this book in the same order and to the same degree of intensity. Moreover, it can-