An Introduction to Crystallography. By F. C. Phillips. Pp. 302, with 500 figs. London: Longmans, Green and Co. 1946. Price 25s.

Just as the writing of a scientific treatise for the general public is more difficult than that of an article for colleagues, so the presentation of the first chapters of a short text-book on crystallography demands more deliberation from the author than the writing of the rest of the book. The author has then to steer clear of many rocks, the most dangerous of which is the reader's impression: 'This matter is too difficult for me; I will have to turn to another subject.' The evading of this danger is worth sacrifices: a white lie can be amply justified—under the circumstances even many of them!

In the first chapters of this book are some of those white lies, perhaps not all of them justified by the difficulties of the subject. Even so, a clever student will be staggered by some unevenness in the text. Moreover, (if he is a very bright boy) he will be baffled by some omissions, and will pose some queries: What about the angular truth of the stereographic projection? Is a prominent axis of symmetry a possible edge (p. 40)? Why must the method of projection in a crystal drawing be one of parallel perspective (p. 44)? What is the proof of Fig. 166? What is the choice of the x and z axes (possible edges!) in a crystal of class 2 (p. 110)? Could not a better nomenclature be imagined for all those different pinacoids?

Having mastered the first hundred pages the student will be charmed by the remaining part of the book. Here the author, in excellent form, is discussing engaging subjects. Here the book is short and stimulating, so that the industrious student is tempted to read at a sitting the chapter on composite crystals and the remarks on crystal drawings. Meanwhile he has had a great many opportunities to deepen his new knowledge by working through the examples of crystallographic calculations.

In Part II of the book the author follows the classical prescript: 'in medio tutissimus ibis', and his excellent description of the 230 space groups keeps the due medium between the two extremes: no knowledge at all and the complete knowledge compiled in the *Internationale Tabellen*. . . .

The book ends in a climax: a clear exposition of one of the newest gains of crystal morphology, namely the Donnay-Harker principle. This important generalization of the well-known Law of Bravais is shown to be capable in many cases of predicting the space group from morphological observations.

Summarizing, our conclusion is: a very good book, that without doubt will stimulate and advance crystallographic studies.

P. TERPSTRA

Kristallografisch Instituut
Melkweg 1, Groningen, Holland