CIRCE, by Giovanni Battista Gelli, translated by Thomas Brown, edited, with an introduction, by Robert M. Adams, and with illustrations by Peter Kahn; Cornell University Press, O.U.P.; 32s.

Giovambattista Gelli was a sixteenth century Florentine shoemaker who combined his commercial activities with a lively interest in culture and genuine literary talent. Despite his business commitments, he managed to acquire an excellent knowledge of Italian literature (his love of Dante comes out in everything he wrote), and also a sound command of Latin. In his leisure moments he frequented the company of scholars and men of letters, and was able to assimilate much of the culture of his time. Indeed, after the accession of Duke Cosimo I in 1537, Gelli played quite a prominent part in Florentine intellectual life. His activities, both with the written and the spoken word, were largely inspired by a desire to help his less fortunate fellows, who lacked the time or opportunity to acquire Latin. To this task, to which others in Italy were addressing themselves at the same time as Gelli, the Florentine shoemaker brought as his special contribution a certain native wit and the ability to see philosophical choices in terms of everyday reality.

The dialogue *Circe*, first published in 1549, was Gelli's most successful work, though in the opinion of some, not as artistically satisfying as Gelli's other well-known work, *I Capricci del Bottaio*. The scene is the island of the enchantress Circe, and the work recounts how Ulysses, for the most part unsuccessfully, tries to persuade some of those whom Circe has turned into animals to resume their human form. The subject of the dialogue is the superiority of the reason over the senses; what makes it different to the many other Renaissance works on this theme, as has often been remarked, is Gelli's realization that in practice the advantages of a life devoted to utility or pleasure often seem to outweigh those of a life based on reason, so that the successful identification of the good life becomes for most men a problematical undertaking.

Despite Gelli's charm and practical wisdom, however, the *Circe*, based on an idea by Plutarch, and incorporating conventional Aristotelian and Platonic material, as mediated through Renaissance culture, is essentially a piece of Renaissance *vulgarisation*, and has no importance outside the history of Italian literature. This occasions some doubts about the value of the volume under review. Certainly it is a pleasant piece of book production, with a charming and informative introduction, some distinguished illustrations, and an accurate and readable translation. But who is likely to find it useful? not the student of English, for as Professor Adams cheerfully admits, the influence of the *Circe* in England has been negligible; nor the person interested in Gelli, for, by the same token, he will almost certainly know enough Italian to read the work in the original; nor even the admirer of the works of Thomas Brown, the translator (1663-1704), for in the interests of accuracy, all those idiosyncratic features that reveal Brown's personality have been removed. About the only buyers who would be wholly satisfied with the volume are the seekers after an out-of-the-

ordinary Christmas present: despite its university imprint, I have a suspicion that this is the public for which it was really intended.

CONOR FAHY

CYBERNETICS: MACHINES WITH INTELLIGENCE, by Neville Moray; Burns Oates (Faith and Fact); 9s. 6d.

This very interesting account of what the machine age is, how it has come to develop and what its limits are, is an ideal introduction to 'one of the most exciting intellectual disciplines of our time'—cybernetics. Dr Moray has considered in very general terms the relationship of living and non-living matter, human and animal life to the machine. He develops systematically the various concepts needed for understanding how the the self-reproducing, self-adaptive machine may come into existence. The concept of the artefact is first considered and then the meaning of feedback systems, system matrices and markov processes is introduced by examples of everyday experience. Various behavioural patterns of systems are then examined which lead to learning and evolutionary processes. The reader is easily able to follow this adventure as Dr Moray proceeds.

He concludes that it is quite possible for self-reproducing systems to come into existence merely by chance and that it is possible to build a type of machine which 'learns' from its past experiences, reproduces itself and shows evolutionary behaviour.

The reviewer, however, believes that Dr Moray might mislead the reader somewhat, as the most advanced self-learning, self-reproducing machine is still only a clever mechanism in relation to the human being and 'it would however be possible for a machine to emerge, which was substantially cleverer than its designer', while true in a certain sense (in the sense that the machine might be able to satisfy *some given criterion* in an ingenious way unthought of by its designer) implies that man may end up with a creature superior to himself; however, not so,—a machine can only do what it is told to do. The possibility does exist, however, that since the mechanism of the human mind is unknown, a machine might appear by chance with such properties and so apparently exhibit a mind of its own. But, this is speculation only and should not be confused with characteristics of the machine, which can be definitely established.

These important limitations on what an artefact can be designed to do (for instance, a machine cannot have self-awareness) are considered in detail by Dr Moray and he shows purely on cybernetic grounds that man is truly unique relative to the animal and machine about him. Throughout all of the development, the relation of Christian teaching regarding the soul, free-will, etc., is considered and it is concluded that contradiction in its teachings does not arise with the arrival of the 'intelligent' machine. The book is to be highly recommended.

EDWARD J. DAVISON