Glory

THE DISCOVERY OF OUR GALAXY. By Charles A. Whitney. 300 pp. New York: Alfred A. Knopf. $15.

"If the stars were visible over a small area of our earth, thousands of pilgrims would travel to that small part of our world to admire the glory of starlit heavens." Thus spake the ancient Roman philosopher Seneca almost two millenia ago. Today, over-grown city dwellers, lost in the glare of mercury lights, are complete strangers to the majestic sight of star-filled heavens which artificial plane-[redacted] a luminous belt spanning the heavens on late summer moonless nights, whose splendor-spelling majestic mystery supersedes anything man can possibly experience on this earth. Away from city illumination, one realizes fully this glorious heavenly pathway studded with stars which, since the dawn of civilization, has been the object of most inspiring and ecstatic feeling, lifting man above the drudgery of earthly life.

Charles A. Whitney, Harvard astronomer, presents in this volume an impressive, panoramic vista of the Milky Way that created the concept of Galaxy (Greek word for Milky Way), our star system of billions of suns, as it evolved through centuries in man's mind. From the idyllic man-centered universe, with the Milky Way a celestial sacred Nile for ancient Egyptians, one of many illusions, we read the thrilling story of man's growing ideas. The Milky Way is now revealed as a fantastic spiral structure consisting of some two hundred billion suns, slowly revolving about itself in more than two hundred million years, a period described as a "cosmic year." The Milky Way, the luminous pathway encircling the entire heavens, actually is the direction of a greater dimension of our star system of more than a hundred thousand light years in extent.

Whitney's text reads as a superb history of the dignity of man who, step by step, has unveiled the awe-inspiring riddle of the universe. Various exploring genial minds, unrecognized, even persecuted, strenuously and with earnest dedication, opened new vistas, unfolding the cosmic drama. All this, when man's view of his place in the universe in the eyes of God still influenced his astronomical view. Thus we follow the cautious or daring steps of Galileo who was first to raise his telescope to the sky and resolve the haze of the Milky Way into a fabulous number of separate star-suns. Newton, thereafter, tied up stellar motion into mechanical equations, little realizing its consequent materialism, exclaiming in his piety: "This most beautiful system of the sun, planets and comets could only proceed from the counsel and dominion of an intelligent and powerful being."

No one, however, did more for the discovery and understanding of our galaxy than a wandering musician who in his later years became the famous astronomer William Herschel. By 1817, Herschel suggested that the faint patch of light in Andromeda constellation is another Milky Way, external to our own, now known to be approximately two million light years distant. How significant that Baade at Mount Wilson, in the war years 1942-43 of the Pacific Coast blackout, was able to resolve this external galaxy into separate stars and reveal that it is a similar companion to our own, in size and extent. How symbolic — "When it gets dark enough, stars come out."

In the last half century or even last decade, our advancement in the apprehension of galaxy has been simply breathtaking. With its quasars, pulsars and "blackholes" of gravitational pits, cosmology has been catapulted into turmoil, unknown to ancient visionaries of biblical Genesis. This volume is beautifully illustrated with classical documentary material. It will be enjoyed by any intelligent reader eager to widen his horizon in this dismal age of political and social inter-regnum by the majestic vista of the vastness of the universe and the glory of creation enveloping our terrestrial speck of dust in the infinity of space.

—KAREL HUJER.