Most amateur astronomers with an interest in galaxies will be familiar with the Hubble tuning-fork shaped classification system linking elliptical, normal spiral and barred spiral galaxies. This system, first described by Edwin Hubble in 1926, and expanded by him in his 1936 book The realm of the Nebulae, was the first serious attempt at defining an evolutionary sequence for galaxies. Hubble continued to work on galaxy classification until his death in 1953, and his modifications were incorporated by his one-time student assistant Allan Sandage in The Hubble Atlas of Galaxies published in 1961.

Gérard de Vaucouleurs’ interest in galaxy classification began in the 1950s, when he tried to fit southern hemisphere galaxies that he had been observing from Australia into the Hubble sequence. He experienced problems at the junction of the tuning-fork prongs (S0 galaxies), something that had also given Hubble concern in his later life. Discussions with Sandage eventually led to de Vaucouleurs developing his own revision of the Hubble system. Almost inevitably his system was more complicated than Hubble’s simple sequence, and used a 3-dimensional diagram to create what was called a classification volume. The long axis contained the main classes of galaxies while a cross-section at each class described families within that class.

The de Vaucouleurs classification system was published in 1959 with only a few illustrations, and the present atlas is the first time that the system has been adequately illustrated. In fact the present authors have slightly modified de Vaucouleurs’ system to take account of modern developments and findings. This is a substantial and very well produced hardback book, comprehensively illustrated with over 500 black and white galaxy images – the vast majority being modern digital images. In addition to the classification images, the book also describes both the Hubble and the de Vaucouleurs systems in detail. There is a comprehensive index, a listing of all the galaxy images, several pages of references and a brief biography of de Vaucouleurs.

The authors are all well known professional astronomers and one of them (Stephen Odewahn) was a former Ph.D student of de Vaucouleurs at the University of Texas. With a new book of this size and complexity it would be unusual if there were not some errors in the data. Luckily there is a dedicated web site at http://bama.ua.edu/~rbuta/devatlas/ which contains a regularly updated list of errata. Most errors are minor, but a more substantial one concerns an incorrect image for galaxy NGC 2217 on p.144 (plate 42). This is actually galaxy NGC 5101. The web site also contains all the images from the book, so is worth perusing before paying the not inconsiderable sum to purchase the volume.

In summary, this is a well produced and unique atlas of images illustrating the de Vaucouleurs galaxy classification system. It is probably not suited to beginners, but serious galaxy observers should certainly consider purchasing it.

Stewart L. Moore
Dr Stewart Moore is an active visual observer with a particular interest in planetary nebulae, although he also observes comets, the planets and meteor showers and has even been seen looking at the Moon. He has been Director of the BAA Deep Sky Section since 2004.

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