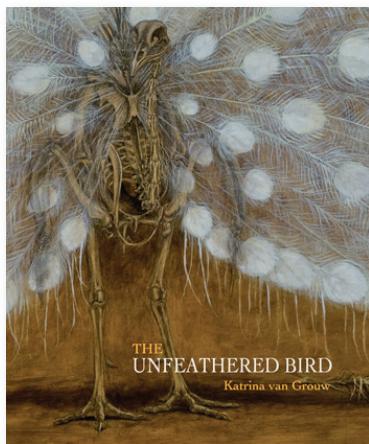


Book Review



The Unfeathered Bird

Katrina van Grouw. 2013. Princeton University Press. Hardback, xiv+287 pp. ISBN 9780691151342. RRP \$49.95

Everyone is acquainted with large format books of bird illustrations. Almost without exception such books are full of portraits of living birds, fully feathered—in other words, from the outside. *The Unfeathered Bird*, while filled with over 385 lovely drawings of birds, is quite unlike any book you've seen before. As the title indicates, in these images the feathers have been removed from the body to show what lies beneath. Few people regularly have such a view (other than for a cooked chook), but by looking at a plucked bird first showing the size and placement of the muscles and then with everything removed leaving only the skeleton reveals so much that is normally obscured from the observer by feathers. The figures in *The Unfeathered Bird* do exactly that—exposing what most people never see.

Short introductory sections on the structure of the skull, trunk and limbs of birds in general set the scene for the remainder of the book. The skeleton of birds is, on one hand, remarkably uniform across this class of animals because the physical constraints of flight limit the diversification that is possible. On the other hand, within these restrictions, there is a wide range of variation possible. This is demonstrated by a survey of the major groups of birds, encompassing 200 species, ranging from ostriches to hummingbirds, flamingos to eagles, and even some extinct species, like the Great Auk. These comparisons quickly reveal the marked divergence within birds, particularly in relative proportions in different parts of the body. The muscles can similarly be compared and contrasted between various kinds of birds. In a number of examples, images of the muscles and the skeleton are shown side by side for the same bird, giving an excellent depiction of the internal avian architecture at several levels.

Rather than being laid out like specimens on a museum slab, most of the subjects are shown in a lifelike position, engaged in characteristic behaviours, such as flight, perching or other activity. Among the most intriguing, and appealing, are an albatross soaring over the ocean, penguins swimming, grebes and cormorants diving, raptors and swamphens holding objects in a foot while feeding, a macaw chewing on a pencil and a whimsical Budgerigar skeleton admiring itself in a mirror. A bird of prey in flight with the head and body feathers removed,

but retaining the wings and tail, is an excellent demonstration of how the flight feathers are placed on the body.

In addition to the pictures of entire bodies, there are numerous close up vignettes of skulls and feet, with a scattering of other features of interest. Often the feature is also shown *in situ*, for example, the woodpecker's tongue, which wraps around the skull, or the manucode's elongated and convoluted trachea, which curls in front of the chest. These and other special aspects are not presented as detached novelties, but in position on the fleshed out but defeathered body.

An interesting theme is what is possible through selective breeding within a single species. The artist presents an assortment of domestic chooks, waterfowl and pigeons, each group exhibiting striking diversity among individuals. These comparisons testify to the major restructuring of the body plan that has been possible in a rather short time through human intervention, especially when compared to the accompanying picture of the wild ancestor.

The text is engagingly written. It presents some general biology of each group of birds, but focuses on the characteristic features these exhibit and explains how their morphology and lifestyle are interrelated. Thus features that are critical for feeding, such as the 'kinked' neck of darters and herons, and locomotion, for example, the contrasting styles of grebes and auks, are explained in a manner to complement the pictures. While not attempting to be comprehensive, the informative text successfully provides the necessary information to add greater appreciation of the illustrations. And it manages to do so while avoiding excessive detail and boring technicalities. There are additional snippets on such aspects as history, relationships and, behaviour. The style is informative and appealing, even quirky in places.

The author/artist is uniquely situated to produce a book like this. Katrina van Grouw has a strong artistic background, having graduated from the Royal College of Art. What has given her the vast experience needed for this project, however, is her time spent as a taxidermist and curator in the bird collections of the Natural History Museum, United Kingdom. In her acknowledgements, she stresses that all drawings were from real specimens but none of the birds was deliberately killed for the purpose, instead relying on those found dead or donated. Most of the specimens were prepared at home, stored in personal freezers before being boiled up and cleaned.

This is not a dry detailed anatomical text and it will not replace such a volume for research purposes. But it does not try to be. The author states that she "attempted to make *The Unfeathered Bird* a convergence of art and science". In this she has been successful. Who is the audience for such a book? It is directed towards those readers interested in knowing more about birds, particularly bird anatomy, without wading through overly technical, jargon-filled prose. It will also attract people who like books of pleasurable, albeit out of the ordinary, artwork. Because of this combination of art and accessible science, *The Unfeathered Bird* should appeal to professionals through amateurs, including those who do not have a strong interest in ornithology. I like this book a lot and recommend it highly.

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