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RICHARD O. PRUM, PhD THE EVOLUTION OF BEAUTY – HOW DARWIN'S FORGOTTEN THEORY OF MATE CHOICE SHAPES THE WORLD

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RICHARD O. PRUM, PhD THE EVOLUTION OF BEAUTY – HOW DARWIN'S FORGOTTEN THEORY OF MATE CHOICE SHAPES THE WORLD

In the great halls of science, dogma holds that Darwin's theory of natural selection explains every branch on the tree of life: which species thrive, which wither away to extinction, and what features each evolves. But can adaptation by natural selection really account for everything we see in nature? Yale University ornithologist Richard Prum—reviving Darwin's own views—thinks not. Deep in tropical jungles around the world are birds with a dizzying array of appearances and mating displays: Club-winged Manakins who sing with their wings, Great Argus Pheasants who dazzle prospective mates with a four-foot-wide cone of feathers covered in golden 3D spheres, Red-capped Manakins who moonwalk. In thirty years of fieldwork, Prum has seen numerous display traits that seem disconnected from, if not outright contrary to, selection for individual survival. To explain this, he dusts off Darwin's long-neglected theory of sexual selection in which the act of choosing a mate for purely aesthetic reasons—for the mere pleasure of it—is an independent engine of evolutionary change. Mate choice can drive ornamental traits from the constraints of adaptive evolution, allowing them to grow ever more elaborate. It also sets the stakes for sexual conflict, in which the sexual autonomy of the female evolves in response to male sexual control. Most crucially, this framework provides important insights into the evolution of human sexuality, particularly the ways in which female preferences have changed male bodies, and even maleness itself, through evolutionary time.

Richard O. Prum is an evolutionary ornithologist with broad interests in avian biology. He has done research on diverse topics, including avian phylogenetics, behavioral evolution, feather evolution and development, sexual selection and mate choice, sexual conflict, aesthetic evolution, avian color vision, structural color, carotenoid pigmentation, evolution of avian plumage coloration, historical biogeography, avian mimicry, and the theropod dinosaur origin of birds. He has conducted field work throughout the Neotropics and in Madagascar, and has studied fossil theropods in China. At Yale, he's the Curator of Ornithology and Head Curator of Vertebrate Zoology in the Yale Peabody Museum of Natural History. He's the Director of Franke Program in Science and the Humanities, which is a new initiative at Yale that aims to foster communication, mutual understanding, collaborative research and teaching among diverse scientific and humanistic disciplines.