Record Nr. UNINA9910366583903321 Autore Bejan Adrian **Titolo** Freedom and Evolution: Hierarchy in Nature, Society and Science / / by Adrian Bejan Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2020 **ISBN** 3-030-34009-0 Edizione [1st ed. 2020.] 1 online resource (XV, 151 p. 75 illus., 13 illus. in color.) Descrizione fisica 600 Disciplina Soggetti Technology Thermodynamics Heat engineering Heat - Transmission Mass transfer **Physics Evolution (Biology)** Popular Science in Technology Engineering Thermodynamics, Heat and Mass Transfer Popular Science in Physics **Evolutionary Biology** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Preface -- Nature and power -- Economies of scale -- Hierarchy --Inequality -- Social organization and innovation -- Complexity --Discipline -- Diversity -- Evolution -- Diminishing returns -- Science and freedom -- Acknowledgements. Sommario/riassunto The book begins with familiar designs found all around and inside us (such as the 'trees' of river basins, human lungs, blood and city traffic). It then shows how all flow systems are driven by power from natural engines everywhere, and how they are endlessly shaped because of freedom. Finally, Professor Bejan explains how people, like everything else that moves on earth, are driven by power derived from our

"engines" that consume fuel and food, and that our movement

dissipates the power completely and changes constantly for greater access, economies of scale, efficiency, innovation and life. Written for wide audiences of all ages, including readers interested in science, patterns in nature, similarity and non-uniformity, history and the future, and those just interested in having fun with ideas, the book shows how many "design change" concepts acquire a solid scientific footing and how they exist with the evolution of nature, society, technology and science.