Work in this area of biology in the laboratory has exploded over the past year, necessitating the formation of a new project. Much of this work, stemmed out of initial studies on the problem of the assembly and intracellular transport of the seven membered T cell receptor complex. These studies led to the formulation of the concept of architectural editing, an overall set of cellular processes that relate the fate of newly synthesized multicomponent complexes within the cell to the structure of those complexes. We have been examining the signals used in architectural editing, the intracellular pathways by which incorrect complexes are edited out of the cell and the recent finding that architectural editing is not simply a mechanism of quality control for abnormal proteins but for the regulated expression of a variety of protein complexes by the cell. Because so much of architectural editing takes place within the endoplasmic reticulum, we have been focusing our attention on new structures and functions within that complex organelle. About the Publisher Forgotten Books publishes hundreds of thousands of rare and classic books. Find more at www.forgottenbooks.com This book is a reproduction of an important historical work. Forgotten Books uses state-of-the-art technology to digitally reconstruct the work, preserving the original format whilst repairing imperfections present in the aged copy. In rare cases, an imperfection in the original, such as a blemish or missing page, may be replicated in our edition. We do, however, repair the vast majority of imperfections successfully any imperfections that remain are intentionally left to preserve the state of such historical works.