

## GENERAL INTRODUCTION

When World Scientific Publishing Inc. asked me to put together a collection of my papers, I thought, at first, these could be naturally divided into sections on various subjects on which I have worked. I was intrigued, in particular, by the section I had already titled mentally, "Orphans". It would include those papers of which I am particularly fond but which have been almost totally neglected by everyone else. I reveled in the opportunity to hector a reluctant world on the gems it was overlooking.

The more I considered the project, however, other than the chapter "Orphans", the less I liked it. It seemed too much an obituary, which I am stubbornly reluctant to write. Rather, I decided I would put together a compilation of those papers that lead directly to work in which I am currently involved. However, when one includes book chapters and written versions of various lectures, there is certain amount repetition (I sometimes feel like an eighteenth century musician, traveling from one concert appearance to another, hastily putting together new symphonies, concerti or overtures, partially constructed from previous work so that in the promotion something can be listed as new). Therefore, I have deleted sections of some articles and added occasional comments so that there is a reasonable sequence of ideas. In addition to papers I have written by myself and with colleagues, I have included some especially relevant papers on which I do not appear as an author. In all I have tried to present a more or less coherent picture of the line of research that has led us to our present investigation of the biological basis for learning and memory storage and the information processing and classification properties of neural systems.