1020-47-224   **Man-Duen Choi*** (`choi@math.toronto.edu`), Department of Mathematics, University of Toronto, Toronto, Ontario M5S2E4, Canada. *Operator theory in Quantum information.* Preliminary report.

I has been surprised that the recent advances of quantum information were much related to all of my earliest research in 1970's about the structure of completely positive linear maps. Here, we seek the new meaning of the old values as well as the the new value of the old meanings. (Received August 28, 2006)