From the matricial point of view, moving one step to the southeast, provides us a bounded operator-valued linear transformation on the C*-algebra of all bounded linear operators on the Hardy-Hilbert space to itself, which enables us first to answer partially a spectral problem raised by Paul R. Halmos, and second to embed Toeplitz operators in an extended setting. In this setting, a new indexed-class of Hardy-Hilbert operators, namely Parametric Toeplitz Operators (PTOs), is defined, and some of their Brown-Halmos type algebraic and operator-theoretic properties are studied. At the end, some Toeplitz and Hankel-type operator-equations are considered and solved. (Received September 17, 2011)