The first part of this talk deals with dynamical systems governed by a function

\[ F: [0, 1] \times [0, 1] = Q \to Q \]

under the hypothesis that \( F(x, y) = (f(x, y), x) \) with \( f: Q \to [0, 1] \) continuous and increasing with respect to \( y \). It is shown that if the set \( \text{Fix} F \) of fixed points of \( F \) is totally disconnected and \( F \) does not have any periodic orbits of period 2, then for all \((x, y) \in Q\) the sequence \( \{F^n(x, y), n = 0, 1, \ldots\} \) converges to a point of \( \text{Fix} F \).

The second part of the talk deals with dynamical systems of the form (triangular)

\[ F(x) = (f_1(x_1), f_2(x_1, x_2), \ldots, f_q(x_1, \ldots, x_q)) + x_I \]

where \( x_I \in \mathbb{R}^q \), and the functions \( f_i, i = 1, \ldots, q \) are uniformly continuous. We assume that \( F \) has one and only one fixed point \( x_s \). Conditions are given that imply the global stability of the dynamical system governed by \( F \), i.e. the convergence to \( x_s \) of all sequences of iterates of the function \( F \) regardless of their initial state. (Received September 10, 2008)