3. Zvi Artstein, **Trajectories and the attainable set of an abstract linear control system.** Mathematical Systems Theory 7 (1973), 265-280.

Abstract. The paper investigates state linear abstract control systems where the solution to the equation is the sum of two parts: a solution to a homogeneous linear equation which does not contain the controls and the solution to the nonhomogeneous equation, but with initial value 0. Properties of these abstract control systems where the state is a Banach space are studied. The abstract approach is an attempt to unify the different theories and to generalize them. Here we study aspects of the system without assuming any linear or topological nature on the controls. The properties studied include the convexity of the attainable set, the result of a σ–concatenation of controls, continuity of trajectories and continuity properties of the attainable set.

For a copy of this paper send a request to zvi.artstein@weizmann.ac.il.