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Fabien Durand, Amiens, France, **Nicholas Ormes*** (`normes@du.edu`), Denver, CO 80208, and **Samuel Petite**, Amiens, France. *Self-induced systems*.

In this paper, we characterize minimal Cantor systems that are *self-induced*. We call a topological system is self-induced if it contains a proper clopen subset such that the induced map on that clopen set is conjugate to the original system. It is well known substitution systems and certain odometers are examples of self-induced systems. We show that an expansive minimal Cantor systems is self-induced if and only if it is conjugate to a substitution system. Similarly, an equicontinuous minimal Cantor systems is self-induced if and only if it is an odometer that contains a prime factor of infinite multiplicity. Beyond this, we provide several examples of non-expansive, non-equicontinuous self-induced systems, including those that are non-uniquely ergodic and those with infinite entropy. We go on to characterize all self-induced minimal Cantor systems as generalized substitutions, by which we mean substitutions defined on a compact (but not necessarily finite) alphabet. (Received February 15, 2016)