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**Judy Anita Kennedy\*** (kennedy9905@gmail.com), Dept. Mathematics, PO box 10047, Lamar University, Beaumont, TX 77710. *Turning a set-valued function into a surjective continuous function.* Preliminary report.

We discuss inverse limits with set-valued functions, or generalized inverse limits, a fairly new object of study by continuum theorists. If  $X$  is a compact metric space and  $F$  is an upper semicontinuous function from  $X$  into the closed subsets of  $X$ , then  $Y := \langle x(0), x(1), \dots \rangle : x(i-1) \text{ is in } F(x(i)), i > 0$  is also a compact metric space. The shift map  $S$  from  $Y$  to  $Y$  defined by  $S(\langle x(0), x(1), \dots \rangle) = \langle x(1), x(2), \dots \rangle$  is surjective and continuous even though it is induced by an object that is not even a function in the usual sense. The price paid is that the new space  $Y$  is generally more complicated topologically than the original space. We give an overview of what is presently known about these new spaces and the dynamics of  $S$ . (Received August 12, 2013)