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Université de Mons, Belgium, and **Antonio Bonilla**, Departamento de Análisis Matemático,  
Universidad de La Laguna, Spain. *Zero-one law of orbital limit points.*

In 2012, Kit Chan and Irina Seceleanu obtained a remarkable result on the dynamics of unilateral (or bilateral) weighted backward shift operators on  $\ell^p(\mathbb{N})$  (or  $\ell^p(\mathbb{Z})$ ): if some orbit under the action of the shift operator has a non-zero limit point then the operator admits a dense orbit, which means that it is hypercyclic. In the bilateral case, their proof is constructive and technically demanding. We present here a new, more abstract, proof that extends the result to arbitrary Fréchet sequence spaces in which the natural unit sequences form an unconditional basis. There is also a version for chaotic behaviour. (Received February 12, 2021)