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Joseph S Miller* (jmiller@math.wisc.edu), University of Wisconsin—Madison, Department of Mathematics, 480 Lincoln Drive, Madison, WI 53706–1388. *Two notes on subshifts.*

First, we show that every Π_1^0 Medvedev degree contains a Π_1^0 subshift. This answers a question of Steve Simpson, who proved that every Π_1^0 Medvedev degree contains a 2-dimensional subshift of finite type, i.e., one for which the set of forbidden 2-dimensional words is finite. It also relates to recent work of Cenzer, Dashti and King, who studied Π_1^0 subshifts. Second, we give a condition on a set of forbidden words that is sufficient to guarantee that the corresponding subshift is nonempty. (Received September 14, 2008)