A good linguistic theory should neither undergenerate (i.e., it should not miss any attested patterns) nor overgenerate (i.e., it should not predict any “unattestable” patterns). We investigate the question of overgeneration in Maximum Entropy Grammar (ME) in the context of basic syllabification (Prince and Smolensky 2004) and obstruent voicing (Lombardi 1999), using the theory’s T-order as a measure of typological strength. We find that ME has non-trivial T-orders, but compared to OT and HG, they are relatively sparse and sometimes linguistically counterintuitive. The fact that many reasonable implicational universals fail under ME suggests that the theory overgenerates, at least in the two phonological examples we examine.