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Oxford, OH 45056. *Scott processes.*

We present axioms for the class of Scott processes of structures in a given relational language, and use them to reprove two classical theorems on counterexamples to Vaught's Conjecture. The first of these is Leo Harrington's unpublished theorem saying that a counterexample to Vaught's Conjecture has models of cofinally many Scott ranks below  $\omega_2$ . The second is a theorem of Sacks saying that a counterexample to Vaught's Conjecture has distinct models of the same countable Scott rank. (Received September 11, 2014)