Definition 0.1. *If $f_1 : \Sigma_1^* \to L$ and $f_2 : \Sigma_2^* \to L$ are proof systems for L, then f_2 p-simulates f_1 provided there is a function $g : \Sigma_1^* \to \Sigma_2^*$ such that $f_2(g(x)) = f_1(x)$ for all x.*

It's easy to show that p-simulation is a transitive reflexive relation, so that its symmetric closure is an equivalence relation. If we require the function g is bounded in length by a polynomial in the length of its argument and a proof system f_2 for L p-simulates a polynomially bounded proof system f_1 for L, then f_2 is also polynomially bounded.