

If input $x \in L$, then an NDTM can solve it in polynomial time because it can use both transition functions simultaneously at each step, causing it to traverse the transition function tree of depth n (number of steps until accepting state) in polynomial time. This accepting state is a leaf of the tree. A PTM has the same transition function tree, but can only choose one transition function at a time, but it still has a positive probability of traversing a path leading to that leaf.

If $x \notin L$, on the other hand, no halting state (i.e. leaf) will be an accepting state. Thus, there is 0 possibility of the PTM ever outputting 1 on x because all leaves will be 0.